The Future of Cross Border E-Commerce

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Tentative Schedule of the First Cross-Border E-Commerce International Forum

Date & Time	Activities	Place
26/11/2018	**Arrival and Registration**	
	10:00-22:00 Registration of participants and accommodation	M412
Day 1 – Opening Ceremony and Academic Sessions *Session Chair – Dr. Zhou Deyi*		
27/11	07:00-08:00 Breakfast	International Academic Exchange Center
	08:00-09:30 **Opening Ceremony**	
	Dr. Qing Ping	Welcome to the participants and opening remarks
	Dr. Li Gucheng	Welcome to the participants and opening remarks
	Dr. Zhou Deyi	Welcome to the participants
	Dr. Abdul Saboor	Potential of E-Commerce in the Rural Economy of Pakistan
	09:30-09:45 Group Photo	
	09:45-12:00 **Academic Session I** *Session Chair – Dr. Wang Qing*	
	Prof. C. Sekhar, - India	Cross Border E-Commerce in India – A Paradigm
	Prof. C. Sekhar- India	The Excerpts of New E-Commerce Policy of India
	Dr. Brice Sozonlin - Gabon	Cross-border e-commerce as lever of development in Africa
	Dr. Gathungu Geofrey, K	Developing Agribusiness Through E-Commerce in Kenya
	Dr. Md. Mostafizur Rahman	Prospects of E-Commerce in Bangladesh
	12:00-13:30 **Lunch Break**	International Academic Exchange Center
	13:30-18:00 - Visit Wuhan Overseas Scholar Park and Lou Lan Mi Yu– Optics Valley - Visit Hemma Online Store	
	18:00-19:00 Back to HZAU and Dinner	

	19:00-20:00	Prof. Zhou Deyi and Cao Shilong	History of Chinese E-Commerce – A Tentative Framework
	20:00-21:00	Miss Xiang Yi	Introduction of a graduated student's e-commerce entrepreneurship
Day 2 – Academic Sessions and Departure to Hangzhou			
28/11	**Academic Session II** *Session Chair - Dr. Geofrey Kingori Gathungu*		
	08:30-10:30	Dr. Umar Ijaz Ahmed – *Pakistan*	Challenges and Prospects of E-Commerce in Pakistan
		Dr. Burmaa Sampil – *Mongolia*	Cross Border E-Commerce in Mongolia
		Dr. Jerotich Sirma – *Kenya*	Potentials of Cross Border E-Commerce in Kenya
		Dr. Mahmoud Moustafa Elhabbaq – *Egypt*	Potentials of E-Commerce in Egypt – A Case Study
	Academic Session III *Session Chair – Dr. Palash Md Salauddin*		
	10:30-12:00	L. Togtokhbuyan and A. Bilguun	E-Commerce Opportunities for Farm Produce of Mongolia
		Dr. Md Salauddin Palash - *Bangladesh*	On-Line Shopping Experiences in Bangladesh
		Dr. Thithit Atchattabhan – Thailand	Design your Life, Design your Learning
	12:00-14:00	**Lunch**	
	14:00-16:40	Railway station and Departure to Hangzhou	
Day 3 – Hangzhou Field Trip			
29/11	07:00-08:00	Breakfast	Hotel in Hangzhou
	08:30-12:00	Visit Alibaba Company Visitors Center	
	12:00-13:00	**Lunch**	
	13:00-18.00	Visit the Wool Industry Cluster in Hangzhou	
	18:00-19:30	Back to Hotel in Hangzhou and Dinner	
Day 4 – Visit to the International Small Commodities Market, Yiwu			
30/11	07:00-08:00	**Breakfast**	
	09:00-09:40	Hangzhou - Yiwu	
	10:00-12:00	Visit Yiwu Lugang E-Commerce Town	
	12:00-13:00	**Lunch**	

	13:00-17:00	Visit Yiwu International Trade City	
	17:00-19:00	**Dinner**	
	Session Chair – *Dr. C. Sekhar and Dr. Muhammad Rizwan Jan*		
	19:00-21:00	Meeting with representatives of Pakistan and Indian Business Association in Yiwu	
	21:00-23:50	Yiwu railway station and departure to Wuhan (*sleep overnight in train*)	
Day 5 – Academic Session VI and Closing Ceremony			
1/12	08:30-09:30	Breakfast	International Academic Exchange Center
	09:30-12:00	Visit Campus and Cainiao Delivery Market (Optional)	
	12:00-13:30	**Lunch and Rest**	
	Session Chair – *Dr Mahmoud Moustafa Imam Elhabbaq*		
	14:00-14:30	Dr. Harb A. El. Hasseen EL-Bardisy - *Egypt*	Marketing strategies for agricultural productsand potential cooperation opportunities of cross-border e-commerce "St. George, Barbados"
	14:30-15:00	Dr. Wang Qing	Information Management System and Technology in Ecommerce
	15:00-16:00	Mr. Traore Lacina – Cote d'Ivoire	Experience Based Education in HZAU
	15:00-16:00	Prof. Zhou Deyi	International Innovation Farm School Alliance Initiative
	Closing Ceremony		
	17:00-18:00	Issue Certificates	
	18:30-20:00	**Dinner**	
	Departure		

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Contents

Chapter - 1

Potentials of E-Commerce in the Rural Economy of Pakistan

Dr. Abdul Saboor

E-Commerce is the emerging economic sector all over the world. Pakistan is not an exception. There is great potential of booming of E-Commerce in its rural economy. Pakistan Economic Survey of 2016-17 reflects the fact that wholesale and retail trade of Pakistan as a component of GDP is valued at around $20.54 billion. UNCTAD's Business to Consumer (B2C) E-Commerce index measures the readiness of various countries to engage in online business and commerce. As per 2016 statistics, Pakistan is 105th among 137 countries on this Index. Pakistan's position has been dropped as compared to the level of 86th position in 2014 (Aziz, 2017). This calls for an urgent need to address E-Commerce issues on modern lines. The rational trick is to triangulate the workable and leading E-Commerce ideas of the world in rural economy of the country. There is an expanding business of E-Commerce of a giant like Alibaba but it needs to be strategically formalized through policy initiatives. There is already a Memorandum of Understanding between Government of Pakistan and Alibaba Group for the promoting Pakistan's exports abroad through well-established E-Commerce system.

There are around 44 million broad band users with an E-Commerce industry of 100 million US dollars. China's and India's E-Commerce transactions are around $ 466 and $ 12 billion respectively. As an important emerging instrument of technology, E-Commerce provides a level playing field for all kinds of businesses to be vibrant and vigorous. It has a variety of spillover effects in other sectors of the economy. As for instance, online ride-sharing Apps have generated employment opportunities and increased the spectrum of customer choice. They have also enhanced the automotive sales in Pakistan. We have witnessed a substantial surge of 172 percent in case of 10000 cc WagonR which is also causing boom to the financing industry in Pakistan. Growth of E-Commerce in Pakistan is linked to various strategies and public policy options.

There are only around 400 E-Commerce merchants in the country. This is hardly half percent of the business running at total physical retail stores. It has

also been noted that around 80 percent of the value of E-Commerce transactions in Pakistan is paid for by 'cash on delivery'. There is quite a nominal percentage of credit/debit cards. The renowned payment system providers like that of PayPal does not properly operate in Pakistan. Pakistani shoppers operating in online markets are confronting many complex issues in the purchase of commodities as well as in the functioning of IT. It is very difficult to bring payments directly in their own accounts. Besides technological failure in the financial system, institutional development, requisite legislations and subsequent regulatory arrangements are not optimal for matching the E-Commerce demand of internet shoppers. Due to lack of such optimal facilities, there might be risk of double taxation. Similarly, capacity related issues are also in the forefront in E-Commerce business and online markets.

History of E-Commerce can be traced back from the 1960s when businesses started Electronic Data Interchange (EDI) to share business documents. The E-Commerce so emerged allowed exchanging goods and services electronically without any barrier of time and distance. The key types of this E-Commerce include Business to Consumer (B2C), Business to Business (B2B), Consumer to Business (C2B), Consumer to Consumer (C2C), Government to Business (G2B), Business to Government (B2G), Consumer to Government (C2G) and Government to Government (G2G). In the domain of these diversified categories of E-Commerce and among the unbelievable E-Commerce success stories of Robert Nava – National Parks Depot Entrepreneurs Morgen Newman and Casey Elsass's Mixed Made, Anny Dunn's Bonobos, Jake Nickell's Threadless, Michael Dubin's Dollar Shave Club, AliBaba has set an unmatchable breakthrough in the very Eastern Culture. Around 100 online shops are to be opened by villagers in a single Taobao Village. This indicates an involvement of around 10 percent of village households in E-Commerce (Alizila, 2017). The technical beauty of this E-Commerce Model lies in its potential of replicability and triangulation across regions and sectors all over world in general and Asia in particular. Pakistan may be a right candidate for triangulation of strategies of E-Commerce in rural areas.

This study has explored the scope and potential of various types of E-Commerce initiatives in the agrarian set-up of Pakistan keeping the major crops, fruits, vegetable and livestock into consideration. In line with the transitional development of AliBaba, some workable strategies are being separately designed for each sector. Moreover, it has also been explored how much employment can be generated particularly of women folk in the rural

areas of Pakistan through the replication of AliBaba's Model of E-Commerce. Some quantitative generalizations have been developed to meet the targets of SDGs through replicable strategies of E-Commerce. An Action Plan is being articulated to streamline the AliBaba's imported versions of E-Commerce all across China Pakistan Economic Corridor (CPEC) not only in Pakistan but in Central Asian States as well. The whole research endeavour has been pursued in the broader domain of Chinomics-an emerging field of Economics arguing more efficiency, effectiveness and productivity of economic resources through a harmonized political system and Confucius charged social system (Saboor, 2018).

Some Best Practices of E-Commerce

Ahmed and Mustafa (2016) illustrated the importance of CPEC on Pakistan's agriculture sector. Through the infrastructure development the growth of many sectors including agriculture can be increased and poverty could be eliminated. Policies related to agriculture sector improvement like small scale industries, transport availability and good infrastructure should be in the side projects of CPEC. Studies show that E-Commerce provides charming incentives for E-tailers to participate in public affairs because they are interested in making connections with the government officials through E-Commerce associations (Huang, 2015).

Ricult is an MIT based online market place where a farmer can sell his crops different fertilizers, other micro nutrients at the website. Ricult offers many benefits to the farmers as for instance farmers can sell their products or crops at high rate. They can have test of their soil samples. In Pakistan, Ricult has been tested as a pilot in Kasur, Faisalabad and Jhang but in vain. Ricult has aimed to unite the farmers of China, Thailand and Pakistan. But the problem is that our illiterate farmers are having lack of knowledge about these technologies and thus could not respond properly. Primarily there is need to educate the rural population by launching different training programs at rural areas.

Ammar Jaffri the founder of Pakistan Social Association (PSA) coined the idea E-Village by setting up E-villages. Fiber optics, broadband web and 10 PCs were provided to the Model E-Village and 50 young men and young ladies were effectively prepared in ICT abilities. The best piece of the E-Village idea is that it gives responsibility for ICT assets to villagers themselves. Every e-Village Resource Center is E-connected to scholastic establishments and research focuses and routinely refreshed.

BigHaat was started in 2015 for enabling farmers to have access on

quality agro-data sources and adornments through a commercial entity. As an online commercial center for farming items, BigHaat gives clients a chance to shop crosswise over classes like seeds, edit insurance supplements and arrangements and agro instruments. It acknowledges online requests and furthermore from their 'feet in the city' display, where business people specifically connect with agriculturists to enable them to put orders for the food items of their need. BigHaat's principle clients other than farmers include nurseries, poly-houses, and contract cultivating networks. It has helped around 50,000 farmers in one year. BigHaat also gives call focus bolster with a 'missed call' benefit through which farmers can ask for a get back to.
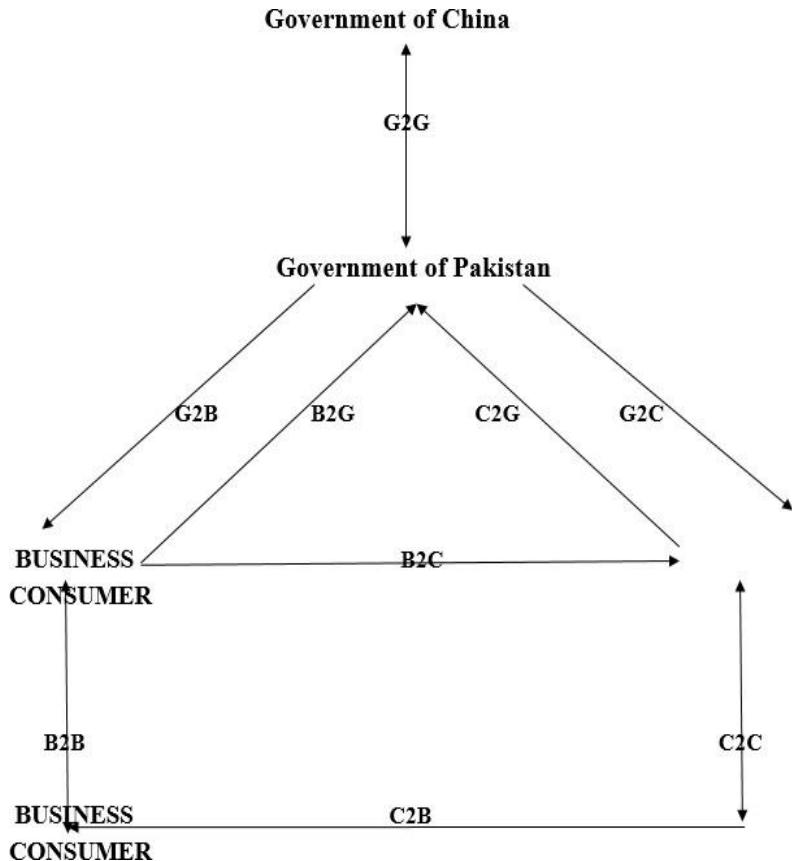
E-Choupal is the venture of Indian Tobacco Company (ITC), a multi-billion dollar private enterprise This was meant to imply its utilization of ICT as a correspondence medium. Ongoing data and tweaked learning given by E-Choupal improve the capacity of agriculturists to take choices and adjust their homestead yield with showcase request and secure quality and efficiency. E-Choupal wipes out inefficient intermediation and different dealing with. Consequently it altogether lessens exchange costs.

The model that best suits for Pakistan is Alibaba E-Commerce model as an online marketplace for agriculture products. This is a sort of hybrid model. It accepts online orders and also from their 'feet on the street' model, where business people can directly interact with farmers to help them place orders for products they need. Alibaba may also provide post-sale support to farmers and helps suppliers by providing 'demand forecasts' based on their data. Similar model can be replicated so that E-Commerce can be adopted in the country in full spirit. There is another plus point that Alibaba is registered in stock exchange markets and having cross border business operations. It has a potential of transformative impact on rural society. This is also good for enhancing the rural economy for domestic consumption driven rather than effortlessly focusing on export led agriculture growth. We can witness Taobao idea of Alibaba in 29 provinces and 600 counties covering 30000 villages (China News, 2017). Alibaba also provides incentive in terms of Pay Per Click (PPC) as ad campaign so as to build the business of suppliers (Yang, 2010).

Dimensional Structure of E-Commerce in Rural Pakistan

While launching E-Commerce in rural Pakistan, the following 9 dimensions of various kinds of E-Commerce domains should be taken into consideration. These include Business to Consumer (B2C), Business to Business (B2B), Consumer to Business (C2B), Consumer to Consumer

(C2C), Government to Business (G2B), Business to Government (B2G), Consumer to Government (C2G) and Government to Government (G2G).

Government of China

G2G

Government of Pakistan

G2B   B2G   C2G   G2C

BUSINESS
CONSUMER   B2C

B2B   C2C

BUSINESS   C2B
CONSUMER

Fig 1

Priority Areas of Intervention for E-Commerce

It is imperative to identify the areas of interest for mobilizing E-Commerce in rural Pakistan. Both backward and forward linkages need to be taken into consideration for prioritizing the areas of business intervention. In the backward market linkages, seeds, fertilizer and pesticides are important at private level. But at public level, e-commercialization of water and extension related advisory services should be promoted. In case of private sector, we will have to focus on B2B and C2C dimensions of E-Commerce while in the domain of public sector, G2B, G2C, B2G and C2G deliberations are important for having win-win situation among government, consumers and producers. Similarly, in forward market linkages, major crops, specific

fruits and vegetables can be launched for E-business through public and private enterprises. As for instance, at the public level, the procurement of wheat in Pakistan can be transparently managed through E-Commerce by avoiding political influences. A gradual and systematic processing would be the hallmark of success of replication of Alibaba E-Commerce Model in Pakistan.

Possible Constrains in the Way of Replication

The prevalence of informal economy might be the key hurdle which could be addressed through various fiscal measures on the part of government. Similarly, the oddity of political economy may close the door of E-Commerce for real deserving candidates and thus the sector suffer from inefficiency and ineffectiveness. There is weak governance system, institutional development and regulatory arrangements in the rural areas of Pakistan which may hamper the national efforts. The incidence of trust deficit at consumer and business levels also needs to be improved for taking full benefit of Alibaba model. There might be financial and capacity related issues which should be settled through holistic approaches. Legal constraints and the ones associated to judicial system cannot be ignored for smooth functioning of E-Commerce business in rural Pakistan.

Steps to be taken for Triangulation of Alibaba E-Commerce Model
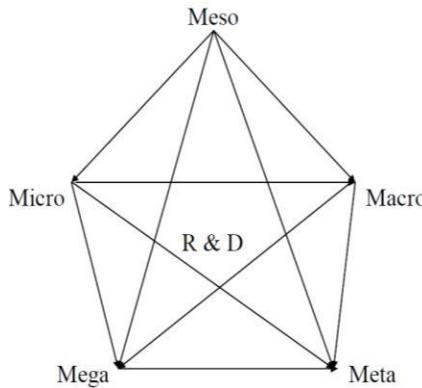
The following steps should be taken into consideration for replicating the appropriate features of Alibaba E-Commerce Model in various business domains of the rural economy of Pakistan.

1) There is need of provision and facilitation of ICTs in rural areas along with standard internet providers that could ensure flow of e-trade 24 hours without any interruption.

2) Farming community and potential entrepreneurs in non-farming sector may be trained for ICTs and tools of E-Commerce. Student internees may conveniently be employed for the purpose of capacity building of farmers and traders.

3) Pakistan should join Information Technology Agreement (ITA) of WTO which calls for elimination of tariffs on various kinds of IT products. The benefits being accrued in the shape of custom duties is far less than the benefit a country could achieve by freeing trade of IT products.

4) Women e-entrepreneurs should specially be trained and facilitated for setting-up E-Commerce interfaces through providing interest free credit.

5) It would be important to associate E-Agriculture Information Management System for promoting E-Commerce in rural Pakistan. Both public and private enterprises can be established by involving local communities through voluntary registrations.

6) Besides relaxation of GST in E-Commerce, an income tax exemption system needs to be announced initially for five year for the entrepreneurs who are interested in setting up e-trade companies. We should not consider this incentive as a loss of revenue rather a good chunk of non-tax payers might be entering into formal markets by using e-wallets and credit cards. When E-Commerce industry would get flourished, tax system can be revived.

7) We will have to build consumers' trust in electronic payments through standard surveillance system and legal shelters. Similarly, the non-cash payment solutions for business people and merchants will have to be made easy.

8) Foreign E-Commerce companies like that of Alibaba can be urged for initiating the idea of Taobao Villages in Pakistan across the CPEC route so that the gravity of e-trade could be enhanced to the tune of mutual benefits of both the countries and thus expanded other Central Asian states gradually.

9) As a pilot project, Arid Agriculture University can develop a strategic link with some selected Taobao Villages through the scholarly and technical expertise of Huazhong Agricultural University, Wuhan and triangulate the idea in some selected villages of Pakistan. Various Chamber of Commerce bodies may also be involved from both sides.

Public Policy Diamond

In order to triangulate Alibaba model of E-Commerce in the rural economy of Pakistan, we will have to focus on a basket of Public Policies rather than a quick fix solution through just one policy shot. In this regard, a philosophical narrative of Public Policy Diamond has been framed as shown in figure 2.

Fig 2

This analogy of diamond emphasizes that we will have to focus on both the micro and macro dimensions of public policies. At micro level, for the stimulation of B2B, B2C, C2C and C2B scenarios of E-Commerce, a dual incentive system needs to be farmed for tax rebate on one hand and financial/technical subsidy on the other hand. At macro level, fiscal and monetary arrangements need to be managed in such a way that a competiveness of all kinds of e-markets are emerged with minimum possible dead-weight loss. Meso level shows the interface between micro and macro policies. It is related to legal and regulatory mechanism associated to the promotion of E-Commerce business in Rural Pakistan. Decentralized policy imperatives are also important in the very Meso perspective. A review of academic studies shows that we get partial success through central driven informatization policies (Oreglia, 2015). The need for Meta perspective of public policy is associated to cultural, political and social narratives which cannot be ignored in the flourishing of a business (See Geng Lin et al., 2016 and Fang Guanxin, 2016). Mega dimension of Public Policy reflects the bilateral and multilateral coordination between countries as for instance between China and Pakistan in the framework of joint E-Commerce Policy for expanding domestic, regional and international markets.

Summary

On the basis of above philosophical discussion and in-depth reviews of literature as narrated in this paper, it is fairly claimed that there is huge potential of mobilising E-Commerce both in the factor and product markets of the rural economy of Pakistan. A holistic public policy basket needs to be designed to create a level play field for smooth functioning of B2B, B2C, B2G, C2C, C2B, C2G, G2G, G2B and G2C domains of E-Commerce.

Strategic planning is also required to address all the physical, infrastructural, technological, regulatory and institutional constraints that may come in the way of boosting online shopping and thus to make the whole e-trade system working and vibrant both at the domestic and international markets. The success of any mega project like CPEC lies with the mobilization of E-Commerce in the true line of e-marketing strategies of Alibaba across its route. A pilot project of Taobao kind of village may be initiated in some selected rural areas of Pakistan by taking Huazhong Agricultural University, Wuhan and Chamber of Commerce bodies over there on board. Down the road, by following suit, the additional benefit may be availed in terms of materialization of SDGs by 2030.

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Chapter - 2

Cross Border E-Commerce in India – A Paradigm

C. Sekhar, M. Karthikeyan, Zhou Deyi and A.Divakaran

Abstract

Cross Border E-Commerce is the general term for purchases made online from businesses in other countries. It involves buying of preferred commodities via websites in other countries or through the online stores available in India. Indian E- Commerce space in this respect is widening day by day. Advent of Technology permits shrinkage of border across the nations and promote online shopping. With the increase in number of online shoppers, the strength of online shopping set to grow exponentially both in volume and value. Preference of varieties, product choices, quality of the produce and its inspection online, comparing the price at the different websites for the similar produce, comparatively lesser price in the online stores when examining the same with the produce sold in the malls or retail stores, congestion in the city traffic and the existence of fatigue among the sales personnel at the malls or business environments forced the consumer and the business personnel to go for online shopping. Around 60 per cent of the respondents have performed their shopping domestically while 35 per cent of the shoppers do shopping in both domestic and cross border E-Commerce and around 5 per cent preferred only cross border shopping in the online stores abroad.

Online retail sales in China has reached $ 752 billion during the year 2016 representing 26.20 per cent growth when one could compare the same during the year 2015, it is almost double the growth rate of overall retail sales. When we compare the same with India, the Indian E-Commerce revenue is anticipated to move from $ 26 billion in 2016 to $ 103 billion in 2020 revealed that China is found to be the world leader in E-Commerce Trade. But if one could compare the India's annual growth rate of E-Commerce, it is arrived at 51 per cent while the Chinese E-Commerce market is prevailing at only 18 per cent. The success was mainly attributed to the existence of E-Commerce organizations across India particularly the role played by the Flip kart, Snap Deal and U.S based Amazon.

Besides the trade of non-agricultural produce, the agriculture based products and grocery shopping has become the priority produce for the Indian consumers. Compared to China, food product trade is expected to be little higher in Indian online retail. In fact, the penetration levels of online grocery shopping in India are already higher when compared to China from the year 2008-09 onwards. Continued interest in getting the produce at the doorstep of the consumers and the product quality found to be the main reasons apart from price to the city consumers. Food, feed, seed, grains, crop services, crop inputs, farm equipment, agricultural implements and machinery and their parts were found to be the main items of purchase through E-Commerce mode in India and other E-Commerce websites.

Lack of Professional Research and Development Team, content based website purely for agricultural and allied produce availability is relatively small, the utilization rate of such website is also small, most of the agricultural websites are lacking professionalism of agriculture, the design and contents of the websites are less attractive are the reasons for slow pick up. Most of the agricultural websites are incapable of reflecting the agricultural information, for help analysis, decision making and the production related information are found to be dismal resulted in poor production, supply and marketing benefits through online. For that the futuristic approaches are to be prioritized with a special focus on Student Exchange Program. In future, the agricultural products will gradually become industrialized such as industrial chain factories in the whole process become more and more standardized. In this respect, Awareness creation exercises are to be intensified with appropriate Higher Education Program as evidenced in China are the need of the hour in India to boost the Cross Border E-Commerce in India. Besides, this paper is also attempting on the aspects of number of E-Commerce Institutions promoting this E-Commerce applications and factors influencing Cross Border E-Commerce.

Key Words: E-Commerce; Cross Border E-Commerce; E-Commerce Institutions; Online Stores; B2B and B2C.

1. Introduction

Twenty First Century has witnessed a tremendous breakthrough in Information Communication Technologies which has enabled the unreachable into the reachable one within a short span of time. This has facilitated not only the production, but also the post-production initiatives like processing, grading, value addition, export and its traceability issues. In these process, many information platforms have facilitated the trade. One

such platform is E-Commerce. Before entering into the detailed discussion on E-Commerce, it is important to highlight what is E-Commerce?, what are the key drivers of its growth and What potential it has in the international and national arena and in this context, the discussion on" E-Commerce is presented as buying and selling of goods and services or transfer of funds from one account to other or data over an electronic networking, primarily using the internet facility. These transaction or exchange that occur between both business to business (B2B) and business to consumer (B2C).

E-Commerce is performed through Electronic Data Interchange (EDI), E-Mail, Shopping Carts, Digital Commerce makes possible for purchasing transaction over the web and supports creation and constant growth of online relationship with customers across multiple channels like retail, mobile, direct sales or indirect sales. The backbone of such development is internet access. The key factors enabling growth of the internet are provided as follows.

- Raising standards of living through enhanced income generation by avoiding intermediary interference
- Foreign investments in E-Commerce sector due to strong growth prospects of international E-Commerce
- Reduced cost of transaction as large section of people have access to internet broadband and fourth generation gadgets (Wireless Mobile Telecommunication Technology)
- Increased use of Smart Phone, Interactive Personal Application Device (I-Pad) and tablets promote the growth of E-Commerce plus most of the expenditures made through mobile devices
- Development of Specific Mobile Application for E-Commerce exchange specifically to Fruits and Vegetables.
- Development and Execution of E-Farm business following B2C principles.

The above factors have facilitated or motivated the E-Commerce in respect of Business to Business and Business to Consumers. Emergence of Specific Mobile Applications has eased the business to the greater extent.

1.1. Market Potential for E-Commerce

India has greater prospects of Market potential with E-Commerce industry growth which is doubling almost year by year. The sector has grown in E-Travel which accounts for 70 per cent of the total E-Commerce. E-Commerce caters the need of young population which are under the age of

forty or plus.

According to World Bank Report (2018), India is found to be the biggest Improver with respect to ease of doing business in India and its rank has been elevated to 77 during 2019 from the level of 100. This is quite a big jump, given that its rank crept up from 142 to 100 in the four years from 2015 to 2018. The World Bank now deems India an easier place to do business in than BRIC Peers such as Brazil (109) and South Africa (82) and West Asian Economies such as Qatar (83) and Saudi Arabia (92). But India has a long way to go before it can catch up with China (46), US (8) Hong Kong (4) and the New Zealand is the top nation in facilitating for doing a business in their nation. India's climb in the 2019 rankings seems to have come mainly from sharply higher scores on two "Doing business indicators" and "Trading across the borders" (The Hindu, 2018). The World Bank while assessing the indicators for ranking different nations for doing ease of business, the trade development is one of the indicator fixed and India could rank in 80 during the year 2019. Whereas the rankings for trade for the year 2018 stands at 146 revealed that the country is fast improving in terms of trade performance including cross border E-Commerce and hence assessing the factors which are responsible for such development is of much important.

1.2. Challenges Faced by E-Commerce Industry

The Indian Government is not motivating foreign investment in online retail companies that is capable of selling the goods directly to the consumers following the B2C concept. The government allows Foreign Direct Investment in the companies owned and manned in India. This move has forced the E-Commerce institutions to abandon their inventory model and shift to electronic marketplace model. In this respect, the E-Commerce companies or institutions need to address many of the issues which are delineated below.

- As the Storage and Warehousing requirements of E-Commerce market is expected to increase in the ensuing years, it is important to establish or strengthen the logistics infrastructure. In respect of Cross Border E-Commerce, there exists the problem of Reverse Logistics

- Since the E-Commerce platform is mostly effected through smart phones, breaching of the security and privacy issues becomes common and hence, care has to be taken to protect the Security and Privacy issues by the organization concerned.

- The Multi-National Corporations and National level companies whom are indulged in manufacturing and distribution of the produce following International E-Commerce platform are not paying the tax regulations on time and hence the revisit of rules and regulations are to be carried out to avoid the loophole escape.

- Some of the customers or consumers are expressing reluctance in using the online E-Commerce platform as they are worried about the credit and debit process using credit cards fearing that someone would have cheated and swindle the money. In this case, cash on hand and delivery may be synchronized.

- Certain companies need to adopt to change in Technology shift from laptop to smart phone facility. They should provide multichannel sales coupled with fast browsing experience along with after sales service. Online reviews, videos, buyback mechanism, comparison of similar products for quality check, three dimensional viewing about the product should also be provided to enhance the new entrants using mobiles and their experiences need to be taken care off to enhance the E-Commerce platform.

- Incidents of distribution of counterfeit goods through E-Commerce platform have also been increasing which has added to the woes of both consumers as well as E-Commerce companies. This is mainly because of the absence of a trustworthy mechanism which can allow consumers to authenticate sellers or their products.

- Data or Cyber Security is another major challenge faced by the players as they deal with huge volumes of customer information, a lot of which is shared with third parties such as logistics providers raising concerns about exploitation by external entities.

- Another challenge is payment by customers in cash. Receiving payment in cash or cash on distribution (COD) makes the process laborious, risky and more expensive for the companies as their working capital requirement increases. Higher return ratio for goods sold online is also proving expensive and presenting challenges for companies. Incidentally, return percentage of orders in COD is much higher compared to online payments.

- The E-Commerce industry in India has seen intensified competition in the sector, which in turn has forced companies to adopt aggressive pricing policies, offering heavy discounts to customers

and high commissions to vendors and other parties.

Above all, the user friendly mechanism, attractive web page not only for the manufactured products but also for agricultural produce may also attract the consumers from different quartz. Amidst all these challenges, one would be interested in documenting the performance of E-Commerce Institutions across the borders and the factors influencing the consumers to depend upon the E-Commerce institutions assumes much importance and hence a study has been initiated among the consumers of products accessed through E-Commerce mode.

2.   Review of Literature on Cross Border E-Commerce

Holger Winklbauer (2018) in his report on Cross Border E - Commerce reported that the consumers in China, Korea, India and the United States are the most active nations.

Harish Pal Kumar (2017) in his report on E-Commerce development in India reported that the presence of government initiatives for the improvement of E-Commerce and also the measures needed to face out the challenges faced by the E-Commerce companies in India.

Das and Affreen (2015) observed that the market of E-Commerce will rise to $ 137 million by the year 2020. The statistics indicate that household income is expected to reach $ 3823 in 2015 and become $ 6790 during the year 2020 which is accounted for 78 per cent increase over the year 2015 and thereby the Indian E-Commerce market is set to grow largest and fastest in the world.

According to Preeti Khanna et al., (2015), hidden costs, website crash, website timeout, unsuitability of delivery option, long processing time were found to be the factors affecting the online shopping experience.

Priti Nigam *et al.,* (2015) has conducted a case study on Flipkart and Amazon concluded that comparison in respect of selling of books, the consumers popular opinion that the amazon is cheaper in dealing with books with less shipping charges. Consumers can gather information about merchandise and hence, can compare a product across suppliers at low cost.

According to Ratchford *et al.,* (2001), the internet may increase use of salespersons, inspections, broadcast ads and personal sources by enlarging the consideration set, thereby increasing return to information. An experienced user only needs to learn price and information about the configuration. The Internet is an efficient source of the required information and an efficient way to make the transaction.

Kotler and Armstrong (2000) pointed out that a person's buying choices are further influenced by four key psychological factors: (1) Motivation; (2) Perception; (3) Learning and beliefs; and (4) Attitude. The perception of making purchases online may vary from consumer to consumer.

According to Guttmann (1998) the unique elements like consumer friendliness which makes online shopping a different one from the traditional in-store retail model. With this background an effort has been taken to conduct the study on Cross Border E-Commerce with the use of both primary and secondary sources of data.

3. Design of the Study

The backbone of any research is the availability of data which were generated from both the primary and secondary sources. Primary source of data is collected through the stakeholder interviews through the set of structured and pretested questionnaire at field. The secondary data were collected from the published sources like Reports of National and International E-Commerce importance, Journals addressing the E-Commerce issues and the related websites dealing mainly with International Cross Border E-Commerce and the method of analysis and its interpretation formed the skeleton of the research. The data and the method of analysis using appropriate tools and its interpretation presents the holistic picture of the issue considered for discussion.

3.1. Sampling Design

The Organizations who are dealing with Cross Border E-Commerce were enlisted from the Website sources and the top ten organizations dealing with Cross Border E-Commerce were Chosen from the list in the first stage. Among the top ten E-Commerce institutions, the organizations whom are dealing with higher number of package distribution per annum to the consumers through the respective distributors and the value of transactions made were enlisted and the two organizations in this respect viz., Amazon and Flip Kart were chosen from the list in the second stage.

In the third stage, 10 distributors each of Amazon and Flip Kart present in the Coimbatore City and the 20 customers of Amazon and 20 Customers of Flip Kart whom are regularly receiving the goods and services from the above two E-Commerce institutions were randomly selected and interviewed forming a total sample of 60 by adopting a three stage purposive sampling technique. The tools of analysis used to arrive the results were descriptive statistics like mean, median and mode. The study was carried out during the month of October 2018.

4. Results and Discussion

The issues taken for discussion is to assess the performance of E-Commerce institutions in India and the factors influencing the consumers to depend on the E-Commerce institutions across the Globe. In this respect, the results are analyzed under the following heads and are discussed separately for drawing a meaningful conclusions. They are

- Profile of E-Commerce Leaders
- General Characteristics of Cross Border E-Commerce Institutions
- Performance of E-Commerce Institutions
- Factors Influencing the Consumers to depend on the E-Commerce Institutions for their various needs
- Governmental Intervention to Stabilize E-Commerce
- Strategies to promote the E-Commerce Trade

4.1. Profile of E-Commerce Leaders

Cross Border E-Commerce is getting great popularity and attraction among the youths of cities across the world. While discussing the E-Commerce, one should discuss on the profile of leaders leading the world in E-Commerce. China is one of the leader in leading the E-Commerce trade across the world and other countries are tracing the path of Chinese model of adoption of E-Commerce. In this situation, the country profile of India and China becomes important and hence these details are analyzed and the results are presented in Table 1.

Table 1: Profile of E-Commerce Leaders (2017)

S. No.	Particulars	India	China
1	Population in Million	1324.20	1403.50
2	GDP in Million US $	2 259 642	11218281
3	Merchandise Trade in Million US $	624177	3685557
4	Internet Users in Millions	391.30	746.70
5	GDP growth in Percentage	7.10	7.30
6	Land Area in Square Kms.	2973190	9388211
7	Rank in UNCTAD B2C E-Commerce Index	83 / 144	65 / 144
8	Rank in International Telecommunication Union (ITU) ICT Development Index	134 / 176	80 / 176
9	Rank in WEF Networked Readiness Index	91 / 139	59 / 139

Source: http://unctadstat.unctad.org;
http://reports.weforum.org/global-information-technology-report-2016/networked-readiness-index

The population of India and China is almost equal. A difference of only 8 crores of population is high in the case of China (Table 1). Shortly India will outperform in enhancing the population unless it takes some control measures. The Gross Domestic Product of India and China is also almost equal. Only the marginal difference in growth is in favor of China. In actual terms, China is a giant and India has to go a long way to reach that level. But the growth is expected to decrease in both the nations according to some macroeconomic estimates. One of the estimate done by International Monetary Fund predicted that the GDP growth in respect of China will reach to the level of 5.60 per cent and the India's GDP will touch to the level of 7.70 during the year 2023.

According to UNCTAD, the B2C E-Commerce Index estimates, India is ranked in 83 out of 144 countries. Whereas, China is ranked in 65 out of the 144 nations. From that one could understand that the China is growing fast in respect of E-Commerce applications between the Businesses to Consumer process. In respect of International Telecommunication Union's ICT development Index, India is in 134th position out of 176 nations. Whereas, China is occupying 80th position in respect of ICT development index out of 176 nations. The internet users in China is also almost double when compared to India. Such strong nations in respect of GDP and other indices, its growth through Cross border E-Commerce and its status assessment is drawn with a view of comparing with its counterpart, China.

4.2. General Characteristics of Cross Border E-Commerce Institutions
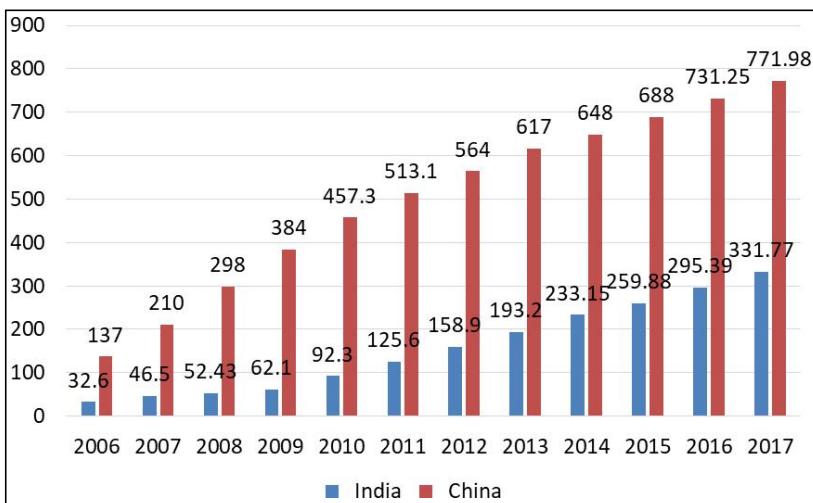
4.2.1. Internet Penetration in India and China

Before availing discussions on the General Characteristics of E-Commerce Institutions, it is important to analyze the causative factor which facilitated the trade to huge extent is of paramount importance. The causative factor for the success is the spread and extent of usage of Internet by the stakeholder institutions through the communication satellite which has made the world into a small village by which one can communicate fast and access the resource needs across the world. The internet removes geographical boundaries, eliminates travel time and provides instant access to products available anywhere in the world (Ratchford, 2001). In this respect, one would be interested in analyzing the details of rate of internet penetration in India and hence these details are analyzed and the results are presented in Table 2.

Table 2: Internet Penetration in India and China

S. No	Year	Number of Internet Users in Millions		Percentage Increase in China over India
		India	**China**	
01	2006	32.60	137.00	320.25
02	2007	46.50	210.00	351.61
03	2008	52.43	298.00	468.38
04	2009	62.10	384.00	518.36
05	2010	92.30	457.30	395.45
06	2011	125.60	513.10	308.52
07	2012	158.90	564.00	254.94
08	2013	193.20	617.00	219.36
09	2014	233.15	648.00	177.93
10	2015	259.88	688.00	164.74
11	2016	295.39	731.25	147.55
12	2017	331.77	771.98	132.69
Percentage Change in a Decade of Time		613.48	267.61	
Compound Growth Rate (per cent)		24.40	14.90	

Source: www.statista.com

Fig 1: Internet Users (Millions)

China is found to be the leader in internet penetration and India is the follower (Table 2). Though India is slowly progressing in respect of internet

penetration when compared to China, India is growing very fast in number of users of Internet. During the year 2017, the number of internet users in China is found to be 771.98 million (Figure 1). Whereas, India had only 331.77 million. When one could compare these figures during the year 2006, 137 million in China and India had only 32.60 million users of internet. In a decade of time, the percentage change in the internet users in India is arrived at 613.48 per cent. But, China could realize only 267.61 per cent increase in internet users over a period of ten years. It is understood that the internet users' growth is alarming in respect of India which is growing at the rate of 24.40 per cent while the China is growing at the rate of 14.90 per cent. If this trend continues, India could out beat China in another decade of time. What is needed here is the facilitating services for the growth and spread of internet services by the respective Governments.

4.2.2. Mobile Phone Internet Users in India
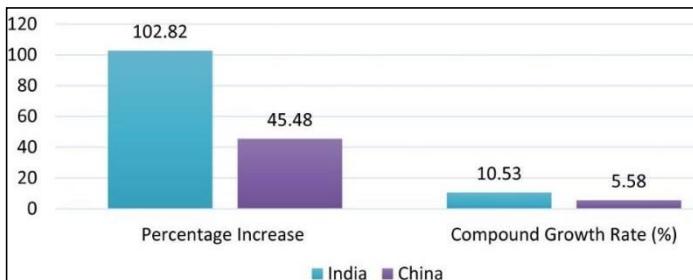
Mobile Phone has played a greater role in the communication process in the current decade and also played a vital role in facilitating the E-Commerce transactions using internet and the growth of Business to Business and the Business to Consumer models also have grown to certain heights. In this respect, one would be interested in learning the extent of penetration of Mobile Phone Internet users in India and China is of much importance and hence these details are analyzed and the results are documented in Table 3.

Table 3: Mobile Phone Internet User Penetration in India and China

S. No	Year	Number of Mobile Phone Internet Users in Millions		Percentage Increase in China over India
		India	China	
01	2015	242.92	588.54	142.27
02	2016	281.81	619.22	119.73
03	2017	320.57	653.16	103.75
04	2018	358.46	690.60	92.66
05	2019*	394.99	730.90	85.04
06	2020*	429.77	772.99	79.86
07	2021*	462.77	815.45	76.21
08	2022*	492.68	856.19	73.78
Percentage Increase during 2022 over 2015		102.82	45.48	
Compound Growth Rate (per cent)		10.53	05.58	

Source: www.statista.com. * are predicted values

Considering the importance of Mobile Phone internet usage in the E-Commerce transactions, the extent of increase has been forecasted to 2022. During the year of 2022, the Mobile Phone internet user's strength is accrued to 493 million. The same was arrived at 243 million during the year 2015. When one could compare the percentage change between the eight year duration, around 103 per cent increase (Figure 2) in the mobile phone internet users will be visualized during the year 2022 over the year 2015. This has resulted in a growth rate of 10.53 per cent indicating that the percentage will be increasing in the years to come (Table 3).

Fig 2: Growth of internet usage through mobile phone

When one could compare the above figures with that of China, the percentage change in the mobile phone internet users' population was found to be 142 per cent increase during the year 2015. But the same increase is not visualized during the year 2022 in respect of China because of poor growth in the mobile phone internet users. This is visible through the data presented in the Table 3. However, India is progressing ahead in respect of growth of mobile phone internet usage and it will outperform China in less than a decade of time. It is predicted that India will have Mobile phone and internet user penetration to the level of 492 million during the year 2022. But according to the Union Communication Ministry of Government of India, the total of 490.66 million subscribers in the country with mobile internet connectivity as on September 2018 (Times of India, 2018). Since Mobile phone is the handy instrument to most of the consumers, they do their purchase through electronic commerce platform operating agencies like Amazon, Alibaba, Flip Kart and so on.

4.2.2.1. Mobile Phone Connectivity in Rural Areas

India have crossed milestone in mobile internet penetration but it has not percolated to the rural areas on time. Majority of the persons having smartphones and net connections are living only in urban areas.

The Maximum number of smartphones with net connection in rural

areas is in Himachal Pradesh of India followed by Tamil Nadu as per the data presented by the Union Communication Ministry of Government of India. Developed States like Maharashtra and Gujarat have less than 30 per cent of the smartphone with net connections in villages. Provisioning of better infrastructure by Telecom Service Providers (TSPs), development of latest technology expansion of network, deployment of additional spectrum, consolidation of networks through mergers and acquisitions, competitive tariff plans offered by TSPs and availability of cheaper mobile handset have played a significant role in the adoption of mobile internet. Nearly 43. 36 per cent of the rural citizens of Himachal Pradesh state of India have smartphones with net connection and in Tamil Nadu several panchayats were provided with Wi-Fi connections and in the rural areas of Tamil Nadu the number of persons having smartphones are very high. Apart from Bharat Sanchar Nigam Limited (BSNL), there are also many private telecom service providers in rural areas of India. In this respect, it is important to know the leading E-Commerce Institutions which are operating in India and other countries.

4.2.3. Details of E-Commerce Institutions

So far the discussion went on analyzing the extent of internet penetration and its users in India and China. Here it is important to discuss the details of E-Commerce institutions operating in India and China and to assess their performance in terms of sales revenue realization and the number of employees it has employed per annum or from its existence is much important here and hence these details are analyzed and the results are presented in Table 4.

Table 4: Details of E-Commerce Institutions Operating in India

S. No	Name of the Company	Number of Employees	Revenue Earned in B$	Head Quarters
01	Amazon	268908	107.00	Seattle, USA
02	Alibaba	26000	12.29	China
03	E-Bay	34600	08.59	San Jose, USA
04	Rakuten	12981	06.30	Tokyo, Japan
05	Groupon	10000	03.10	Illinois, USA
06	Flipkart	35000	01.50	Bangalore, India
07	ASOS.com	07500	01.40	London, UK
08	Zalando	10000	03.28	Berlin, Germany
09	Net Ease	12919	03.63	China
	Total	417908	147.09	

Source:https://www.worldatlas.com/articles/the-25-largest-internet-companies-in-the-world.html

There were 9 institutions operating the Cross Border E-Commerce with the base of India. In all these institutions, a total number of employees employed were accounted to be 4.18 lakhs and the revenue earned is arrived at 147 billion US $. Among the nine E-Commerce institutions, Amazon alone found to be the biggest one which had the share of 64 per cent of total employees of E-Commerce Institutions (Table 4). The revenue earned by the Amazon alone is accounted for 73 per cent to the total revenue earned by the E-Commerce Institutions. The head quarter of Amazon is located in Seattle, USA and the head quarter of Alibaba is positioned at China, the next highest and biggest operator of E-Commerce in India. Similar to Indian E-Commerce operators, the E-Commerce institutions operating in China are also analyzed and the results are presented in Table 5.

Table 5: Details of E-Commerce Institutions Operating in China

S. No	Name of the Company	Number of Employees	Revenue Earned in B$	Head Quarters
01	Alibaba Group Holding Ltd (NYSE: BABA)	66421	44.70	Hangzhou, China
02	*JD.Com Inc*	125835	62.90	Beijing, China
03	*Tencent Holdings Ltd*	44796	44.50	Shenzhen
04	*Baidu Inc*	39343	14.70	Beijing, China
05	*Vipshop Holdings Ltd*	58702	12.60	Guangzhou, China
06	*Net Ease, Inc.*	18129	10.00	Beijing- China
07	*58. Com Inc.*	23132	01.40	Beijing, China
08	*Jumei International Holding Ltd*	2886	00.894	Beijing, China
09	*Autohome Inc*	4097	00.821	Beijing, China
	Total	383341	192.515	

Source: which-50.com, www.owler.com

There were nine institutions operating the E-Commerce platform in China. Among these nine, J.D.Com Inc. is found to dominate other institutions in China. It is employing 1.26 lakh employees and has earned 62.90 billion US $ as revenue. The share of J.D.Com Inc. revenue is accounted to be 32.97 per cent to the total revenue earned by the E-Commerce institutions in China (Table 5). When compared to the number of employees manned by the Indian E-Commerce Institutions and the China E-Commerce Institutions, the Indian E-Commerce institutions could employ higher number of workforce but the revenue earned by the Indian institutions is found to be little less when we compare the same with China. Such income increase could be contributed by participation of higher number of

buyers. In this respect, one has to examine the details of digital buyers through the E-Commerce websites and hence these details are analyzed and the results are presented in Table 6.

Table 6: Digital buyers in India and China (Buyers in Millions)

S. No	Year	Digital Buyers in India	Digital Buyers in China	Percentage Increase in Digital Buyers with China over India
01	2016	130.40	521.00	299.54
02	2017	180.10	582.00	223.15
03	2018	224.10	650.00	190.05
04	2019*	273.60	722.00	163.89
05	2020*	329.10	797.00	142.18
Per cent Change during 2020 over 2016		152.38	52.98	
Compound Growth Rate (per cent)		25.47	11.24	

Source: www.statista.com

The data for the years 2019 and 2020 are predicted values based on the growth rate. The overall growth rate for the five year period is arrived at 25.47 per cent for Indian digital buyers. Whereas, the growth rate of digital buyers in respect of China is arrived at only 11.24 per cent (Table 6). After seeing the experience of digital buyers, the other customers were also motivated in India to buy the produce through E-Commerce platform.

When one could examine the percentage change in the number of digital buyers during the year 2020 over the year 2016, it is arrived at 152 per cent increase in respect of India. Whereas, the percentage change during the year 2020 over the year 2016 in respect of China is found to be dismal and it is arrived at only 53 per cent. From that one could understand that the digital buyers in India are more interested and motivated to buy the produce through E-Commerce platform. Though this increase is visibly appreciable in China, it is only absolute figures. But its growth is increasing at decreasing rate and hence the China should examine the futuristic aspect of retaining E-Commerce platform active to meet the requirements of youth in China.

4.3. Performance of E-Commerce Institutions

Under the head of performance of E-Commerce, the discussion on the following will be giving a complete picture on the modus operandi of E-Commerce. They are

- E-Commerce Sales Made in India and China
- E-Commerce Education Programs in India and China

Over the years, the E-Commerce sales is found to be increasing worldwide and even a small consumer friendly produce produced in a remote city could be easily accessed because of the internet facility and the same were found to be received through E-Commerce mode. For that the above organizations are helping the consumers by displaying the physical appearance and its special features on the website. This will help the customers to examine the produce and the purchases were made as per the procedures delineated in the web site. In this respect, the sales revenue made through E-Commerce is assessed and the details are presented in Table 7.

Table 7: Retail E- Commerce Sales in India and China

S. No.	Year	Sales in Million U.S. Dollars		Percentage Increase in Sales with China over India
		India	China	
01	2016	16,073	403458	2410.16
02	2017	20,059	499150	2388.41
03	2018	25,076	599995	2292.71
04	2019*	31,123	700005	2149.16
05	2020*	37,979	794579	1992.15
06	2021*	45,206	880638	1848.06
07	2022*	52,301	956488	1728.81
Percentage Change in Sales during 2022 over 2016		225.40	137.07	
Compound Growth Rate (per cent)		22.05	15.47	

Source: www.statista.com * are predicted values

When compared to the revenue earned by the Indian E-Commerce Institutions with that of China, China could realize around 2293 per cent increase in the sales revenue over the Indian counterpart during the year 2018. However, the sales revenue is found to be increased over the years and attained a growth of 22 per cent in a period of 7 years while China has attained the growth in sales revenue of 15 per cent (Table 7).

The percentage change in the sales revenue during 2022 is arrived at 225 per cent in the case of India while the same is 137 per cent in China over the year 2016 revealed that the India could realize sales revenue through E-Commerce transactions on the higher side and hence it should concentrate on the facilities to be provided for performing the E-Commerce platform and

this E-Commerce transactions are mostly unaware to the youth in the class – II cities and hence as part of the awareness creation exercise, the E-Commerce education has to be intensified as it appreciably implemented in China. In this context, a thorough analysis of E-Commerce programs available in India so as to draw the futuristic programs for activating and facilitating the E-Commerce transactions becomes important and hence these details are analyzed and the results are presented in Table 8.

Table 8: Details of E-Commerce Programs Offered in India

S. No.	Name of the E-Commerce Program	Duration in Months	Eligibility	Number of Institutions Offering
01	Certificate Program in E-Commerce	06	10th	05
02	Diploma in E-Commerce	12	10+2	04
03	Post Graduate Diploma in E-Commerce	12	Graduation	04
04	BBM (E-Commerce)	03 Years	10+2	02
05	B.Sc. (E-Commerce)	03 Years	10+2	02
06	B.Com (E-Commerce)	03 Years	10+2	17
07	MBA. (E-Commerce)	02 Years	Graduation	01
08	M.Com (E-Commerce)	02 Years	Graduation	02
09	M.Sc. (E-Commerce and Web Design)	02 Years	Graduation	02
Total Number of Institutions				39

There were around 39 institutions offering different programs in E-Commerce to infuse the knowledge on Electronic Commerce. The knowledge giving programs are classified into the following

- **Certificate Programs in E-Commerce:** With a duration of six months for the high school drop outs so as to instill the confidence of doing business through electronic media or to get the basic idea of E- Commerce so that they will be employed in the E-Commerce institutions as delivery boys or agents. However, it is not mandatory to possess such E-Commerce certificate programs as one of the eligible qualification for delivery boys. All the school and high school dropouts were selected and employed in the E-Commerce Institutions and they will provide the training to those delivery boys for a period of one week both in-house and field training on delivery of goods (Table 8).

- **Diploma in E-Commerce and Post Graduate Diploma in E-Commerce:** are offered by 8 institutions.

- **Bachelor Degree:** Courses like B.B.M., B.Com. and B.Sc. focusing Electronic Commerce as its specialization to infuse new skills and expertise to the Students.

- Similar to the Under Graduate Programs in E-Commerce, the Post Graduate Programs were also offered by some of the institutions in the Electronic Commerce exclusively and in combination with Web Design (Table 8).

Still these programs are not much attractive to the youths interested in pursuing graduate studies. If other programs are not available, these programs were given preference by the students who pass out the higher secondary examination. In this respect, to give a boost to this program, the inter-university collaborative and exchange programs in E-Commerce with universities abroad has to be initiated. The Principals of Arts and Science Colleges should take such a vision based approach to impart employable candidates in consultation with the appropriate authorities. However, analyzing the education programs available in the area of E-Commerce with the E-Commerce giant, the China is also important and hence these details are analyzed and the results are presented in Table 9.

There were variety of E-Commerce programs available with China for the benefit of their Graduate and Post Graduate wards. The variety of programs included were E-Business; E-Commerce; Financing; Cross Border E-Commerce and Electric Trade are the specialized programs offered to the students of China in a four year duration of Under Graduate program. The foreign students are permitted for admission in China if they secure the International English Language Testing and Speaking (IELTS) score of 5.50 with the high school graduation certificates (Table 9).

The Masters' Degree Programs are offered to the students in the areas of specialization like Information Management and E-Commerce; E-Commerce; Financial and E-Commerce Trade; E-Commerce and Logistics Management. These Master Level Programs earmarked for a period of 3 years and the Doctoral programs are attracting the duration of three to five years. The Doctoral Programs are offered in the areas of specialization are E-Commerce; Information Management and E-Commerce.

Table 9: Details of E-Commerce Programs Offered in China

S. No	Name of the E-Commerce Program	Duration in Years	Eligibility	Number of Institutions
01	Certificate Program in Chinese + Cross Border E-Commerce	3 Weeks	1. New HSK (Chinese Proficiency Test) Level 3; 2. Non-Chinese citizens 3. Age above 18	01
02	Bachelor Program in E – Business	4 years	1. Age Over 16 2. High School Graduate	18
03	Bachelor Program in E-Commerce	4 Years	1.High school graduate, 2.New HSK Level 5, 3. IELTS Score 5.50	36
04	Bachelor Program in E-Commercial	4 Years	1. Age limit Above 18 2. Graduation from senior high school; 3. HSK level 4	01
05	Bachelor Program in Financing	4 Years	1. Age limit Above 18 2. Graduation from high school 3. HSK level 6	01
06	Bachelor Program in Electronic-Trade	4 Years	1. 17 Year r above 2. Graduate of senior middle school	01
07	Bachelor Program in B B A in E-Business	4 Years	1. Age 18-28; 2. HSK level 4 3. Qualification of overseas student must be equivalent to Graduation from high school	01
08	Bachelor Program in International Business (Cross Border E-Commerce)	4 Years	1. Age above 18	01
09	Associate Program in E-Commerce	3 Years	Graduate from School	01
10	Master Program in Information Management and E-Commerce	3 Years	1. Non-Chinese citizens, 2. Age under 40 3. Attain a Bachelor's Degree	02
11	Master Program in E-Commerce	2 Years/3 Years	1. Undergraduate study equivalent to Chinese Bachelor's Degree 2. TOEFL 80, IELTS 5.5	02
12	Master Program in Financial and Trade E-Commerce	3 Years	1. Age limit Above 18 below 40 2. Non-Chinese citizens 3.Must have Bachelor's degree 4. New HSK Level 5	01
13	Master Program in E-Commerce and Logistics	3 Years	1.Must have Bachelor's degree	01

	Management		2. New HSK Level 5	
14	Doctoral Program in E-Commerce	3-5 years	1. Must have Bachelor's degree 2. New HSK Level 5 3.Recommended by two professors or associate professors	02
14	Doctoral Program in Information Management and E-Commerce	3 Years	1. Non-Chinese citizens, 2. Age under 45 3. Attain a Master's Degree	03
15	Total Number of Institutions Offering E-Commerce Programs			70

Source: www.cucas.edu.cn/find/E-Commerce

To sum up, one could infer that the Chinese Programs in E-Commerce are well defined and attracts youth for induction into the above programs. Whereas in Indian context, the undergraduate and post graduate programs are not focused much towards E-Commerce. In India, it is a seeking program and China has a demanding programs. In this context, the E-Commerce education can be linked with Chinese leading universities to draw much skill to the youth in the area of E-Commerce. Student Exchange programs (SEP) can be thought off at university level to enhance the quality of the program. Another, option is enhancing the duration of the program from three year to four year program in E-Commerce and other basic degree in arts and science by infusing industry – institution linkages to enhance the skill among the students. The education programs on E- Commerce would have added an awareness to the consumers who make periodic purchases and hence these results are analyzed and the results are presented in Table 10.

Table 10: Awareness Gained by the Consumers in E-Commerce Applications

S. No	Awareness of the Consumers	Number of Consumers (Multiple Response)	Percentage to Total
1	Amazon Store	34	85.00
2	Flip kart Store	26	65.00
3	Big Basket	06	15.00
4	E-bay	01	02.50

Source: Primary Survey conducted during October 2018.

The consumers are much aware about Amazon store which was expressed by 85 per cent of the consumers who make purchases through online stores followed by 65 per cent of the consumers have expressed that they were aware about the Flip Kart store (Table 10). However, when comparing these two stores, the Coimbatore city consumers were aware more about Amazon and only 15 per cent of the people are aware about the

Big Basket promotions and the E-Bay got the least. On these lines, it is important to assess the frequency of visits made by the consumers to the respective stores becomes important and hence these are analyzed and the results are presented in Table 11.

Table 11: Frequency of Visits Made to E-Commerce Stores per Annum

S. No	Frequency of Visits Made	Number	Percentage to Total
1	None	04	10.00
2	10 to 20	18	45.00
3	30 to 50	10	25.00
4	60 to 100	05	12.50
5	More than 100	03	07.50
	Total	40	100.00
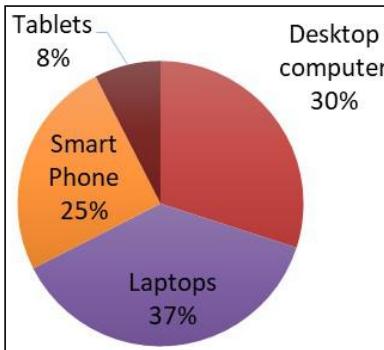
Source: Primary Survey conducted during October 2018.

Out of 40 consumers, 18 consumers were making 10 to 20 visits to the E-Commerce Stores which are accounted for 45 per cent followed by 25 per cent of the consumers were making a visit of 30 to 50 times. More than one hundred visits to the E-Commerce stores were made by only 7.50 per cent of the consumers (Table 11). It revealed that the consumers were frequently accessing different websites for different and innovative products. If their preference matches, the purchase request is made and the money transfer is effected for making delivery of the product. In this case one has to focus on the devices through which a consumer prefers to procure the produce in E-Commerce platform and hence these results are analyzed and the results are presented in Table 12.

Table 12: Details of Preferred Devices for Procurement of Goods from Online Shop

S. No	Name of the Device	Number of Respondents	Percentage of Total
1	Desktop computer	12	30.00
2	Laptops	15	37.50
3	Smart Phone	10	25.00
4	Tablets	03	07.50
5	Total	40	100.00

**Source:** Primary Survey conducted during October 2018.

Fig 3: Device Preferred for Online Purchase

Out of 40 consumers, 15 consumers make use of the Laptops for Procurement of produce through online store which accounted for 37.50 per cent which is followed by the desktop computer users whom are accounted for 30 per cent of total consumers responded. Around 10 respondents were using smart phone as their main device for placing procurement orders online (Figure 3). From this one could infer that the Laptops and the desktop computers were mainly used by the consumers for making purchases.

In this circumstance, one would be interested in assessing the opinion of consumers on procurement made by them from online stores and hence these details are analyzed and the results are presented in Table 13.

Table 13: Details on the Process of Procurement Made by the Consumers

S. No.	Process of Procurement	Number of Respondents	Percentage
1	Not Preferring online Purchase of Produce	01	02.50
2	Buying of Produce online after analyzing the information provided about the product	11	27.50
3	Gathering information from the internet and discuss with others before placing order online	16	40.00
4	Gathering information from the internet, visit shops to verify the details and then decide either to buy online or to buy locally	08	20.00
5	Gathering information from the internet but prefer to buy only from the local dealers / shops	04	10.00
	Total	40	100.00

Source: Primary Survey conducted during October 2018.

In general, the consumers are found to be so cautious in making purchase of produce through online stores. Before effecting the purchase, 40 per cent of the consumers used to gather the information about the product

from the internet and discuss with others before placing the orders online. It is followed by 27 per cent of the consumers used to buy the produce online after analyzing the information provided about the product in the websites of the online stores. Around 20 per cent of the consumers used to gather the information about the product from the internet, visit the shops to verify the details and then decide either to purchase the produce from online store or from the shops available locally. These consumers are mostly come under the risk averting category of consumers. From that one could infer that the consumers accounted for 27 per cent to the total are risk taking consumers because they see the product from the website and decide the product after reading the quality features of the product (Table 13). So they rely on the words of online stores because they might have built reputation among the consumers over years. In this context, one would be interested in analyzing the frequency of purchase of produce through E- Commerce mode and hence these results are analyzed and the results are presented in Table 14.

Table 14: Frequency of Purchase of Produce through E-Commerce

S. No.	Purchasing Frequency	Number of Consumers	Percentage to Total
1	Occasionally	05	12.50
2	Fortnightly	00	00.00
3	Once in a Month	01	02.50
4	Once in 2 Months	03	07.50
5	Once in Three Months	02	05.00
6	When Need Arises	29	72.50
	Total	40	100.00
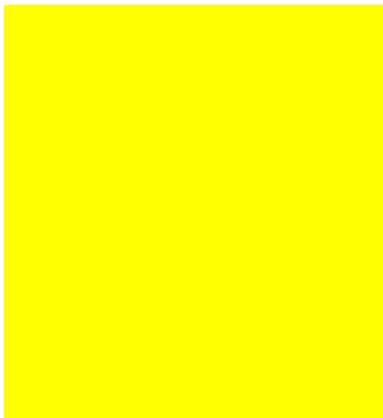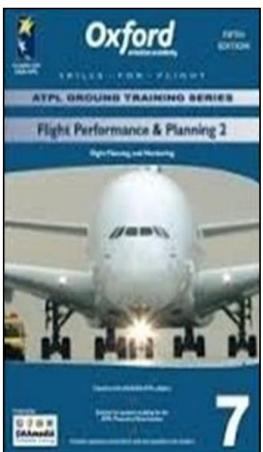
Source: Primary Survey conducted during October 2018.

Any purchase should be backed by willingness to purchase; desire to purchase and purpose of purchase of a commodity. These decides the frequency of purchase. In respect of E-Commerce mode, the consumers are more interested in accessing the E-Commerce platforms when the purchase need arises to them. This was reported by around 29 respondents whom are accounted for 72 per cent to the total consumers followed by occasionally purchasing consumers whom are accounted for 12.50 per cent. Other category of consumers are having the attitude of purchasing once in a month and once in two months (Table 14). It might be due to their interest developed towards procuring some innovative products from the store. Here, one should show some interest in analyzing the nature of produce purchased by the consumers and hence these are analyzed and the results are presented in Table 15.

Table 15: Nature of Produce Procured through E-Commerce Mode

S. No.	Nature of Produce	Number of Consumers (Multiple Responses)	Percentage to Total
1	Farm Related Produce (Food)	13	32.50
2	Electronic Goods and Toys	32	80.00
3	Machineries and Farm Equipment	15	37.50
4	Fashion Related Products	16	40.00
5	Fiction and Non-Fiction Books	06	15.00
6	Reading Manuals and Videos	03	07.50

The farm related produce were purchased by 32 per cent of the consumers which is mainly effected through Big Basket online store and the electronic goods and toys were found to be purchased regularly by almost all the consumers from different online stores whom are accounted to be 80 per cent to the total. Machineries and farm related equipment purchase was made by around 37 per cent of the households. The online stores also floating the fashion products to attract the women consumers. Accordingly, the fashion product purchase through online stores were accounted to be around 40 per cent to the total respondents (Table 15). Whereas, one of the consumer has highlighted the reading manual purchase from the Amazon Store for his reading and training related purposes. The same are presented in the form of a picture (Figure 4). In this circumstance, one would be interested in assessing the value of purchase made by the consumer respondents per annum and hence these are analyzed and the results are presented in Table 16.

Fig 4: Sample copy of Book Purchased by a consumer from Amazon

(Kindly provide good quality image)

Table 16: Value of Purchase Made by the Consumers per Annum

S. No.	Value of Purchase	Number of Respondents	Percentage to Total
1	None	05	12.50
2	Less than Rs.1000	02	05.00
3	Between Rs.1000-Rs.5000	16	40.00
4	Between Rs.5000-Rs.10000	13	32.50
5	Above Rs.10000	04	10.00
	Total	40	100.00

Source: Primary Survey conducted during November 2018.

The consumer respondents accounted for 40 per cent were effecting purchase worth of Rs one thousand to Rs five thousand category followed by 32 per cent of the consumer respondents were effecting purchase of Rs five thousand to Rs ten thousand. Only 10 per cent of the consumers have made their purchases more than Rs ten thousand. While examining the value of purchase, one could infer that the middle income people are more interested in effecting such online purchase from E-Commerce stores (Table 16). Whereas, the high income group are spend thrifts. They used to visit quality show rooms for their requirements.

4.4. Factors Influencing Procurement of Products from Online Stores

Electronic Commerce is gaining momentum across the world means it should have some strong factors in support of performing the E-Commerce trade. The influencing factors for performing the E-Commerce trade are summarized in Table 17.

Table 17: Factors Influencing Procurement of Products from Online Stores

S. No.	Influencing Factors	Total Score Gained	Average Score	Rank
1	Less Price when compared to the Store at Show Room in the City	2515	62.88	I
2	Ease of Usage and Comfort	2351	58.78	II
3	Website Quality and Informative	2246	56.15	IV
4	Products Reliability and Availability of Variety of Products in the Online Stores	1933	48.33	VI
5	Provision of Various Offers and Customer Services in the Online Stores	2324	58.10	III
6	Easy Payment System	2029	50.72	V
7	Quick and Fast Delivery Mechanism	1689	42.23	VII
8	Easy Buyback Mechanism	1542	38.55	IX
9	Saving of Time, Energy and Cost	1632	40.80	VIII

Source: Primary Survey conducted during October 2018.

The factors which are capable of influencing the Cross Border E-Commerce initiatives were many. According to the consumer survey taken in the Coimbatore City, the consumers of Coimbatore city has expressed differently regarding the factors. Let us look into those factors expressed by the consumers. Considering the time availability, the survey was restricted only to the Coimbatore City.

Among the nine influencing factors, the top ranking factor to go for the E-Commerce Institution web site for purchase of goods and services are "Less Price when compared to the Store at Show Room in the City" followed by Ease of usage and comfort. The first factor has gained 62.88 as its score and the second factor has scored 58.78 as its score. According to Garett's rank, the third rank goes to "Provision of Various Offers and Customer Services in the Online Stores" which has got 58.10 as its score. The fourth rank goes to Web site quality and the site seems to be informative to the consumers when they access the site which has secured 56.15 as its score. The fifth rank goes to ensuring of Easy Payment System (Table 17).

The sixth rank goes to the factor entitled "Products Reliability and Availability of Variety of Products in the Online Stores" which has gained 48.33 as its score. Time saving, energy saving and saving of transportation cost for purchase of the goods were not visible in the case of E-Commerce purchase and hence this factor has been ranked in the 8th position with a score of 40.80. The ninth rank goes to the Easy buy back mechanism available in the online stores which has secured 38.55 as its score.

To sum up, the motivational factors for Cross Border E-Commerce purchase is found to be Less price, ease of usage and comfort and provision of offer for the products intend to purchase from the online stores were found to be the predominant factors. At the same time, one should also be interested in assessing some of the factors which may hinder the purchase of the product in the online stores and hence these were analyzed and the results are presented in Table 18.

Table 18: Factors Affecting Procurement of Commodities from Online Stores

S. No.	Factors Affecting Procurement	Total	Average	Rank
1	Difficulty in Understanding the Interface	2020	50.5	III
2	Inability to Examine the Product physically prior to purchase of the same	2172	54.3	II
3	Presence of Low Quality Produce	1980	49.5	VI
4	Consumers have big concern about the security of the Debit or Credit Card	1721	43.025	VII

5	Accomplishment of Procedures and Delay in Credit of Money for Return of the Product	2208	55.2	I
6	Chances of Fake Delivery of the Produce	1983	49.575	V
7	Higher Shipping Cost and Import Duties	2003	50.075	IV

Source: Primary Survey conducted during October 2018.

The details of factors which hinders the consumers in effecting the purchase of the commodity from online stores is outlined here. There were seven factors which demotivate the consumers according to the survey. The first demotivating factor is "Accomplishment of Procedures and Delay in Credit of Money for Return of the Product" which has gained 55.20 as its score followed by Inability to Examine the Product physically prior to purchase of the same is found to be the second important demotivating factor which has secured 54.30 as its score. Third factor is difficulties in understanding the interface of the system followed by less attractiveness of the web page promoted by E-Commerce institutions. These three are the principal factors which demotivate the consumer to go for online stores (Table 18). However, the demotivating factors are not fully demotivating but the consumer at one point got convinced and search the web page for some other product in another occasions and they become acclimatized and don't bother about the factors hindering the purchase.

4.5. The Government Efforts on Stabilizing and Promoting E-Commerce

- The Government of India had launched an E-Commerce portal called TRIFED and a portal called "Tribes India" which has enabled 55000 tribal artisans get access to international markets. On the lines of TRIFED, the farm grown commodities can also be provided similar arrangements so that the Farmer Producer Organization can also enter into the international markets.

- Cent Per Cent FDI is allowed in companies engaged in B2B E-Commerce Business on the lines of Walmart and Alibaba.

- Cent Per Cent FDI is allowed for trading of food products manufactured or produced in India through E-Commerce platform

- The Food Safety and Standards Authority of India (FSSAI) has also issued draft norms for licensing online food operators. The Consumer Affairs Ministry is also planning to regulate E-Commerce sector highly competitive.

- With no major entry barriers and with few e-tailers, the Indian market for E-Commerce has grown at a fast pace for the past three

years. Omni-Channel retailers such as Shoppers-Stop; Reliance; Croma etc have also embraced E-Commerce as another sales channel to increase digital footprints.

- The United States is one of the top ten countries for cross border shopping for Indian buyers. Automotive, Baby product supplies, toys, clothing, footwear, wearable and accessories, jewelry, watches, cosmetics, health products and digital entertainment and educational services are some of the leading categories for cross-border E-Commerce. Some of the challenges restricting the growth of cross-border E-Commerce are high shipping costs, import duties and complexities in returns and exchanges. These are to be revisited.

4.6. Strategies for Promoting Cross Border E-Commerce

Recently, USA has imposed restrictions and raised import duties for certain products and this has become a big impediment for the Cross-Border E-Commerce and hence in a joint sitting, one has to negotiate to alleviate the cost escalation in respect of food products and its shipping to consuming end in India or China.

From the consumer survey, one could understand that the awareness creation through appropriate education is lacking in Indian context and hence awareness creation exercise need to be created. As part of the awareness creation exercise, the Student Exchange Program with Indian Universities and the Chinese Universities can be thought off.

Since E-Commerce platforms are expanding their wings to food and farm related products, the academic programs focusing E-Agribusiness; E-Agribusiness and Information Management; E-Agribusiness and E-Commerce; E-Agribusiness, E-Commerce and Logistics can be thought off and the same may be implemented in Farm Varsities so as to infuse diversification in the existing programs.

The Academic Programs in support of Cross Border E-Commerce is lacking in India when compared to China and hence the program like E-Agribusiness and E-Commerce can be introduced in the Departments of Agricultural Economics or by establishing a separate department for E-Commerce and Agribusiness or even a School of E-Commerce and Agribusiness can be thought off in the Farm Varsities. The forum of Cross-Border E-Commerce has to specifically recommend such initiative so that such initiative will emanate from the State Governments of respective country.

4.7. Summary

The cross border E-Commerce is gaining momentum in many nations. Among these, China is the country leading in a big way followed by India in absolute terms. When one could compare the performance of E-Commerce Institutions in India, the performance of them will outperform the Chinese institutions shortly as per the growth rate in respect of certain indicators. To be specific, the internet user's penetration and the Mobile phone internet user's rate are exorbitant in respect of India than China. To stabilize the E-Commerce trade, the governmental interventions are needed in certain areas like attracting Foreign Direct Investment in E-Commerce business. Besides, E-Commerce education in Indian Universities are to be diversified so as to infuse greater awareness and to realize its impact.

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Chapter - 3

The Excerpts of New E-Commerce Policy of India

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Abstract

This Chapter is an outcome based on the India – US trade Policies or Strategies. As part of US-India trade relations, United States-India Strategic Partnership Program (USISPF) has been made and the six pillars of USISPF have been discussed with focus on policy advocacy. Besides, to promote the E-Commerce Trade, India has constituted a Task Force on E-Commerce Policy under the Chairmanship of Minister for Commerce and Industry, Government of India and the task force has developed a draft E-Commerce Policy for India. The essence of Draft E-Commerce Policy and its outcome on implementation have also been discussed in this chapter.

Key Words: Draft E-Commerce Policy; US-India Strategic Partnership; E-Commerce Rules; Task Force on E-Commerce

1. The New E-Commerce Rules

Before discussing on the E-Commerce rules, let us have a look into the US-India Strategic Partnership Forum. What it is? What for it is? are of much important to the readers and users of E-Commerce. The United States-India Strategic Partnership Forum is a non-profit organization, with the primary objective of strengthening the US-India bilateral and strategic partnership.

The Executive Board came together in 2017 to establish USISPF with the purpose of enabling the business and governments to collaborate and create meaningful opportunities that can positively change the lives of citizens. The formation of USISPF signals a new chapter in US-India relations. Dedicated to strengthening economic and commercial ties, USISPF plays a significant role in fostering a robust and dynamic relationship between the two countries through policy advocacy that will lead to driving economic growth, entrepreneurship, employment creation and innovation to create a more inclusive society.

To achieve these goals, USISPF works closely together with businesses and government leaders, both at the local as well as the federal levels. The

forum works to educate government leaders and law makers in both the countries on issues relating to the US-India commercial and strategic partnership. NGOs and independent organizations to enable inclusive growth and enhance long term development goals.

2.   The Six Pillars of USISPF

The Six Pillars of US-India Strategic Partnership Forum are presented as follows

- Strategic Engagement
- Inclusive Development
- Policy Advocacy
- Innovation and Entrepreneurship
- Legislative Affairs and
- B-B-G Opportunities

2.1. Strategic Engagement

USISPF engages with the governments, business and other stakeholders in the United States and India, one areas that address challenges and create opportunities for its member companies or organizations. Through theme-based research and knowledge sharing, the forum aims to chart the next chapter of collaboration between both the countries.

2.2. Inclusive Development

USISPF focuses on inclusive growth by combining corporate initiatives and government priorities. The Forum leads strategic development in both India and the United States by aggregating corporate social responsibility initiatives, assisting in public-private partnership projects, facilitating education-related exchanges and building stronger cultural ties.

2.3. Policy Advocacy

USISPF engages with member companies or organizations through its 12 sector-specific committees focused on policy advocacy to further economic growth and commercial partnership between the United States and India. The following areas in which specific committees were established.

- Manufacturing
- Workforce Mobility
- Food, Agriculture and Retail
- Technology, Media and Telecommunications

- Intellectual Property Rights
- Business Process Management
- Services Sector
- Aerospace and Defense
- Healthcare
- Infrastructure
- Energy Development
- Financial Services and Tax Related Issues

2.3.1. Technology, Media and Telecommunications Committee

Let us focus on what are the delineations on Technology, Media and Telecommunications which is considered to be the core area for the E-Commerce.

In our globalized world, the ever increasing importance of technology is undeniable. The ability for seamless data-flows and interoperability between our nations and businesses, in a secure and effective way, is imperative. The Technology, Media and Telecommunications Committee (TMTC) aims to drive synergies and educate stakeholders to ensure flexibility in policy making, given the dynamic nature of this sector. USISPF will facilitate the exchange of ideas in the areas of Artificial Intelligence (AI), big data, and internet of things (IOT), as these concepts have the ability to greatly impact the lives of the citizens. Convergence of Cyber-Security threats and challenges also provides an opportunity for both the countries and industry to work together towards better solutions. In Media, the forum liaises with the stakeholders both in the public and private area driving forth the issues of companies on censorship, intellectual property and opening the Indian Market for foreign investments in the sector.

2.3.2. IPR Committee

USISPF – IPR committee will focus on building a framework to support high technology transfer between the US and India. Innovation is the lifeblood of both economies, and a strong and predictable IPR regime will help encourage this. The Business Process Management Committee will aim to create a streamlined dialogue between all the stakeholders to address the tactical challenges in this space ranging from Cyber Security issues to Fraud Challenges.

2.4. Innovation and Entrepreneurship

USISPF believes that innovation will fuel job creation in both economies. By working towards a robust IP framework supported by a strong entrepreneurial spirit, USISPF enable the investments, technology transfer and sustainable innovation. It provides institutional support for startups through incubators, investor outreach platforms and mentorship infrastructure.

2.5. Legislative Affairs

USISPF aims to promote the interests of both countries by engaging with Democrats and Republicans in the house and senate in the United States with Parliamentarians in India. USISPF believes that shared democratic values lie at the heart of the growing United States-India Strategic Partnership and will lead through dynamic exchanges on the legislative side.

2.6. B-B-G Opportunities

USISPF aims to provide its member companies or organizations a platform to track the opportunities at the state and federal level, explore new avenues for investment and deepen engagement with relevant stakeholders. The forum will also provide government and business introductions where appropriate.

The United States – India Strategic Partnership forum has dubbed the new E-Commerce rules as "Regressive" and said that the changes would harm consumers, create unpredictability and have a negative impact on the growth of online retail in India. The Forum asserted that "it is not the Government's Business to Micromanage Businesses" and alleged that the amendments announced came out without any consultation and are akin to changing rules in the middle of the game.

3. The Background of E-Commerce Policy of India

India is one of the biggest and fast growing E-Commerce markets in the World. The total size of the industry was reported to be US $ 14.50 billion in 2016 and it is expected to grow to the tune of US $ 80 billion by 2020 AD (Choudhury 2018). Indian E-Commerce sector registered a growth rate of around 24 per cent as discussed in the previous chapter. This promising trade performance has attracted investment from various quarters. Almost all the major domestic corporate giants like Tata, Reliance and Birla have forayed into this business. Worlds' biggest online traders like Amazon and Alibaba have also invested to get a considerable share of Indian rupee. Recent acquisition of Flipkart by Walmart is one of the example.

Currently, this sector is regulated by various individual policies like the

Information Technology Act, 2000, Competition Act, 2002, Consolidated Foreign Direct Investment (FDI) Policy etc. India's first attempt to formulate a specific policy for the E-Commerce sector can be traced back to 2014 when Department of Industrial Policy and Promotion (DIPP) issued a discussion paper asking feedback from the stakeholders whether to allow FDI in retail E-Commerce sector or not. However, the decision on the same has not been made public yet. As the feedback was asked only regarding the FDI in the sector, it was not an inclusive attempt to frame a policy for governing the entire sector.

Indian E-Commerce firms allegedly violated the existing Compensation Policy, FDI norms, The Foreign Exchange Management Act (FEMA), Taxation rules etc. (Choudhury, 2015). A series of cases are registered against most of the E-Commerce players and the Delhi High Court in November 2015 has ordered the Government of India to investigate 21 E-Commerce websites for possible violations of FDI laws. In 2012, Enforcement Directorate investigated a similar case against Flipkart and Amazon in India (Choudhury, 2015). Cases were lodged in Competition Commission of India against the firms for alleged "abuse of its dominance" by indulging in unfair and discriminatory practices. Complaints were made by the state Government of Karnataka against the Indian E-Commerce firms for allegedly evading value added tax in 2014.

Two retail trade bodies had also alleged that the Government's existing retail policy does not allow E-Commerce firms to directly sell to the customers, but in the garb of the marketplace model these firms are directly selling to the customers, thus violating the rules (Mishra, 2018)

Apart from these domestic challenges, there are a number of challenges that the Indian E-Commerce sector faces internationally. During the recent Ministerial Meeting of World Trade Organization (WTO) held in December 2017, Indian authorities found themselves unprepared to negotiate rules facilitating Cross Border E-Commerce. The Major concern for India arose when 71 countries led by US, China and Japan issued a joint statement, saying that they would launch an exploratory work-analyzing existing FDI regulations to have an in-depth understanding for the future WTO negotiations on trade-related aspects of E-Commerce.

E- Commerce is also discussed specifically in other multilateral forums where India is a party, like Regional Comprehensive Economic Partnership, and the Comprehensive Economic Cooperation Agreement. The CEPA between India and Singapore came into force in 2005 and is undergoing second review. It is expected to assert a separate chapter on E-Commerce in

the agreement. Realizing the issues from domestic and international perspective, India addressed the concern by setting up a think-tank in April 2018, under the Chairmanship of Minister of Commerce and Industry to formulate a Comprehensive National Framework for E-Commerce Sector (Mishra, 2018).

4. Draft E-Commerce Policy of India

- Much of the growth in the E-Commerce sector is on account of cheaper smartphones and data tariffs, along with enhanced connectivity. The next phase of growth is expected to come from Tier – II and Tier – III cities. This results in considerable level of employment creation, productivity enhancement, and increased consumer participation on online platforms.

- The Traditional Retailers had voiced concerns about large E-tail players with deep pockets pricing them out of the market and have been seeking a level playing field.

- Many of the Rules currently exist in some or the other form and are enforced by a multiplicity of Government Departments and regulators.

- A national E-Commerce policy will be an attempt at creating a one – stop shop for the norms and regulations under which online retailers will be covered.

- All India E-Commerce Policy will also enable better negotiations on multilateral issues with the World Trade Organization.

4.1. Present Status of E-Commerce Policy

- The Government does not allow Foreign Direct Investment (FDI) in E-Commerce companies that hold their own inventories.

- Online retailers with foreign investments can only operate as market places – letting sellers list their products on the Online Platform.

- Marketplace operators cannot hold inventory and sell products on their platform – they can only facilitate the process for other vendors. Example: Amazon and Flip Kart provide platforms to other sellers and vendors by allowing them to list their products.

- An E-Commerce entity cannot allow more than 25 per cent of the sales transacted on its marketplace from one vendor or their group companies.

- Due to the restrictions on the inventory based model, E-Commerce companies have not been able to offer their in-house brands extensively.

- There were several incidents across the country of customers expressing dissatisfaction with products they purchased online. In some cases, bricks and soaps have been delivered instead of mobile phones.
- This is an inherent flaw of the marketplace model, where platforms do not have full control over the supply chain. The customers have also complained of prices being artificially higher than the maximum retail price (MRP) and of problems with the delivery of purchased products.
- The consumer affairs ministry's National Consumer Helpline is currently the only redressal mechanism available for such grievances.

4.2. Task Force on E-Commerce

The Secretary, Ministry of Commerce is found to be the Chairperson of the Task Force on E-Commerce. The First meeting of the Task Force on E-Commerce held in New Delhi. The meeting deliberated upon the suggestions emerging from the sub-group meetings held during 20th to 22nd June, 2018. The suggestions were on wide ranging issues such as cross border data flows, trade facilitation and logistics, consumer confidence, Intellectual Property Rights, Foreign Direct Investment and Competition issues.

The sub groups saw participation from various Ministries and Departments, High level representatives from the industry bodies, E-Commerce Companies, Telecommunication and IT companies and Independent Experts in the field of E-Commerce. The Task force was further meeting was held on 24th April, 2018 under the Chairmanship of Minister of Commerce and Industry and Civil Aviation. The Task Force was further divided into nine sub groups for preparing recommendations for India's National Policy on E-Commerce.

4.3. Recommendations of the Task Force on E-Commerce

4.3.1. Inventory Model

- The Task Force has recommended that Foreign Direct Investment may be allowed in Inventory-Based E-Commerce companies up to 49 per cent with the condition that the E-tailer sells 100 per cent made in India products. This will allow the E-Commerce firms to offer their own brands as long as they are made in India. It is also suggested that foreign E-Commerce websites be brought on a level playing field with their Indian counterparts.

4.3.2. Market Place Model

- For Online Market places, restrictions would be imposed on group companies of such platforms. The market places will not be able to offer deep discounts through their in-house companies listed as sellers. This is to prevent them from directly or indirectly influencing the price of goods and services.

- Bulk purchases of branded goods" by related party sellers which lead to price distortions in a market place" will be prohibited.

4.3.3. Consumer Protection

- To provide a forum for consumers, the task force suggested a Central Consumer Protection Authority (CCPA). This besides helping the consumers, will act as the nodal agency for intra-government coordination. It will thus provide a platform for E-Commerce operators regarding complaints of fraudulent activities.

4.3.4. Redressal

- The Draft suggests a separate wing to be set up in the Enforcement Directorate of Government of India. This will handle grievances related to guidelines for foreign investment in E-Commerce.

4.3.5. Payment

- Currently, a large number of payments for online purchases is made through the Cash-on-Delivery option. To make online payments safer, the task force has suggested creating a fraud intelligence mechanism. This would use artificial intelligence-based authentication systems, for early detection of frauds in the E-Commerce transactions.

4.3.6. Regulations

- Greater regulatory scrutiny has been recommended for mergers and acquisitions that may distort competition. A relook has been suggested on what constitutes entry barriers and anti-competitive practices. The Competition Commission of India has been asked to undertake such exercises. This assumes significance in the light of the recent acquisition of Flip kart by US retail major, The Walmart. The policy also suggests a sunset clause for deep discounting wherein a "Maximum duration" would be set for "differential pricing strategies".

4.4. Implications of E-Commerce Policy

- If the Draft E-Commerce Policy is implemented in fullest spirit, it could impact consumers' online shopping experience in multiple ways. They include how the discounts are given, the availability of newer products and the redressal of complaints.

- The Draft Policy makes a strong case for Championing Indian online enterprise and creates a level playing field for homegrown companies.

- E-Commerce platforms would have to mandatorily provide the Government's RuPay payment option.

- It may have major implications for foreign-owned E-Commerce majors operating in India

- Having a regulator, E-consumer courts may better address complaints about online financial frauds.

- In the long run, it helps the country and make in India. Millions of Micro, Medium and Small enterprises have a better chance to go online. It will also help large companies build a viable business rather than just depend on discounts.

5. Summary

Electronic Commerce is gaining momentum among the consumers across the nations because of larger internet penetration and smart phone usage. People have become more interested in making online purchases by listening to the internet and the computer connectivity. Because of the E-Commerce platform floated by many E-Commerce firms, online purchase becomes more easy than the shopping of materials from the malls and the retail outlets. To regulate the E-Commerce operators and to protect the local retailers and the traders, the Government of India had constituted the Task Force on E-Commerce to draft the E-Commerce policy under the chairmanship of Minister for Industry and Commerce, Government of India. The task force have met during the month of June 2018 and chartered the action policies for implementation. If the draft E-Commerce Policy is implemented on time, the policy would facilitate the E-Commerce firms to operate in a big way.

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Chapter - 4

Developing Agribusiness through E-Commerce in Kenya

Gathungu Geofrey K.

Abstract

Farmers in Kenya use different inputs without linking their use to enterprise profitability. The farmers as they are in most instances are not linked to markets they also buy inputs or sell their products to middlemen who greatly exploit. In this context, there is a need to develop a concept for an innovative online market place which establish competitive situation among the input providers, or consumers of horticultural products that will assist and enlarge supply side and discontinue inflexible trade structures. This study aims at demonstrate the role that E-Commerce may play in the input and product level of horticultural business in Eastern and Central Kenyan region. This will facilitate horticultural products marketing at local, regional and international levels and promote business earnings or profits which will in return have enormous impact on the economies of these regions and the country as a whole.

Key Words: Horticultural Business, E-Commerce, Challenges and Benefits of E-Commerce

1. Introduction

In most countries of the world, there has been development in information technology due to availability of cost effective applications that can be used in the marketing of horticultural commodities. The value of E-Commerce, particularly in rural areas, must be determined on whether it can change how producers, managers and consumers can transact agribusiness activities to improve on product and service delivery. E-Commerce can be used in promoting horticultural trade across borders at local, national, regional, and international level.

Agribusinesses producers and managers need to change the way they think about their business structure by embracing E-Business and E-Commerce through setting up a website or buying and selling products online by using internet as a tool in their activities (Ehmke *et al*., 2001). This

will involve using Internet to communicate with current and potential customers, as well as with their suppliers of production inputs. There is need for producers, managers and consumers to understand how E-Commerce may affect horticultural product and input delivery. In Kenya there has been an increase in computer adoption as well as internet use. However, this is mainly in urban areas while rural areas lag the rest of the country in Internet adoption and use of E-Commerce.

In a traditional product chain the products move from the producer or manufacturer to the consumer through a series of produce handlers. This means each link of the chain conduct its business with its neighbors on either side of the chain. It means there is little contact with the rest of the players in the chain. Due to the perishable nature, the horticultural products may increase postharvest losses. With information technology there is need for transition from traditional agriculture mode to modern agriculture mode. Developments in information technology can allow new relationships between and among agribusiness players and improve competition and profits due to resulting complex web of interaction that even bring larger agribusinesses to local markets. E-Commerce has been very active in various sectors, including Government, Higher learning institutions, Scientific research institutions, and Social service organizations. The penetration of E-Commerce into agricultural sector is an inevitable trend (Wang et al., 2016). Adoption of E-Commerce will develop opportunities for expansion and increased chances of horticultural businesses survival including the remote producers. Further, adoption of information technologies may help producers to manage financial or environmental risks and also become the players in the electronic oriented market places. Bringing of sellers and buyers together, makes the focus to a price-centered negotiation and increases the trading volume, reliable grades and standards and reasonable charges to the consumers.

In Kenya, Safari.com mobile money platform, M-Pesa has played a greater role in E-Commerce (Masoko). The establishment of an electronic market place and innovation space on the input side may bring about a major breakthrough in this situation improving purchase conditions in agriculture offering an opportunity to expand production through improving profitability (Erdeiné Késmárki-Gally et al., 2015). Use of E-Commerce in horticulture can potentially tighten the supply chain and cut marketing margins and transaction costs in ways that benefit smaller, local producers as well as local agribusinesses. It will allow a wide range of products to be transacted, usually at a price that is competitive with local retailers.

Although, there is growing adoption of E-Commerce in most commodity trade, utilization of this strategy in horticultural product and service delivery in Eastern and Central Kenya region is scanty. Use of E-commerce in agriculture may involve use of Internet for selling agricultural products and purchasing agricultural inputs. In the generalized sense, E-Commerce in agriculture also incorporates the aspects of marketing, research and development, training to impart knowledge and skill development, seeking for employment information, purchasing articles for daily use and village affair management, all by using Internet (Wang et al., 2016). In Kenya, there is high illiteracy rate in rural areas, where adoption of low agricultural technology is prevalent, computer and internet penetration is low and information communication is poor. Therefore, the circulation of horticultural products has too many links with high transaction cost and poor product value chain resulting to low profits. There is a need to establish the application of information technology in these areas to identify opportunities that have not been exploited and improve the horticultural business in the region. To mitigate the issues, research effort is being intensified with the focus of determining the status of horticultural business and its prospects using E-Commerce platform and to learn the attitude of the farmers and opportunities prevalent for E-Commerce mode. Besides, research is also intensified in the areas of imparting educational programs in the area of E-Commerce in the Universities of Kenya.

2. Significance of Research

Knowledge in the utilization of information technology may result to horticultural business stakeholders reorganizing or rethinking their business plan. This may be an indicator of the growth in horticultural business on adoption of E-Commerce. This will lead to the growth of players using Internet or starting a website to allow to conduct business and increase sales quantity through expansion of customer base. There may also be a possibility of cutting operation costs in the horticultural business value chain. The driving force of the horticultural businesses should be to reduce transactions costs and also centralizing sales. The adoption of the technology will also allow documentation of activities like crop planting, spraying, harvesting, handling, and storage. Making this information available to customers and potential customers may, indeed, prove to attract a substantial horticultural produce price premium or expand the market opportunity. The research study will enlighten horticultural businesses on their capacity to be involved in E-Commerce. Use of E-Commerce will enhance business between businesses or between the business and the customers/consumer of products.

Therefore implementing an E-Commerce site represents a new strategy for business growth gives an opportunity to expand the marketplace of products and services from a producer/farmer.

3. Issues and Strategies for Better E-Commerce in Kenya

According to the Secretary General of United Nations Conference on Trade and Development while speaking at the African Union E-Commerce Conference in Nairobi outlined that the continent is however lagging behind compared to Western Europe where E-Commerce accounts for 75 per cent of all purchases. But Kenyan E-Commerce estimates is around 6 per cent of all purchases through E-Commerce.

African Countries can do better. With about 300 million smart phones, E-Commerce has the potential to grow economics and also market led productions. Here in Africa when ordering online, one has to Pick, Pay and then pray. Adequate regulations and political goodwill will drive the E-Commerce growth going forward. He called on the African Governments to continue championing the use of E-Commerce through creating an enabling environment for developers and aspiring entrepreneurs.

Rwanda is a great example of a collective political commitment to developing digital skills. Governments need to focus on improving the cross-border challenges in a bid to enhance the E-Commerce in the continent. For that the Government should make ways and means of implementing the Digital payment system which is a necessitated one.

A Joint Report by the Communications Authority of Kenya and the Kenya National Bureau of Statistics found that more firms, about 27 per cent sold their products online. The report also found that, for most of the enterprises which are accounting to 32 per cent, the main deterrent to online selling and buying was the fact that their products were not suited for sale via the internet. Already established E-Commerce players in the country include Africa Internet Group's Jumia, Safarcom's Masoko, Kilimall International and OLX, a unit of Johannesburg-listed Naspers Limited. During the third quarter of the 2018-19, the total internet subscriptions hit 36.10 million. The Kenya's E-Commerce is estimated at 6 per cent of all purchases made during the year 2017 (UNCTAD, 2018)

4. The Need of E-Commerce Institutions

When Jumia ventured into the Kenyan market in 2013 after cracking success in Nigeria, Egypt, Morocco and Ivory Coast, the E-Commerce company was banking on the fairytale success of Safaricom's M-Pesa to

make a killing out of the high number of Kenyans with smart phones. Lack of mainstream E-Commerce players in the country and proven interest in online technology by Kenyan is the main reasons for the poor performance in E-Commerce Initiatives.

Amazon.com does not exist in Africa but it is one of the 10 most popular websites in Kenya. A lot of Kenyans who have their relatives abroad are buying online with Amazon, asking the goods to be shipped to relatives who bring them to Kenya next time they visit. It showed that Kenya is very open to online shopping. The Communications Authority of Kenya estimates the industry to be worth a mouthwatering Ksh 4.3 Billion. In this context, the Institutional / Governmental intervention is the need of the hour to promote E-Commerce in Kenya in a big way.

According to Kabuba Purity during the year 2014, E-Commerce has experienced an unprecedented growth following the invention of the internet. Online companies in developed economies have been largely successful contributing to the economy and in employment generation. In Kenya the E-Commerce sector is only in the formative stages. The consumers of Kenya are opening up to the idea of online shopping and relatively few full-fledged online companies are already in operation in the country. In his study he found that some of the Challenges are affecting online businesses but to a moderate extent are furnished as follows.

- Potential customers reluctant to shop online due to the desire to touch / interact with the product prior to making a purchase
- Lack of personal contact with customers which might be beneficial to business
- E-Commerce software incompatibility with the existing infrastructure,
- Customer distrust regarding privacy of personal data
- Customers generally lacking trust on online businesses

Further the findings of the study revealed that the massive benefits associated with online trading. The top rated benefits included cost reduction for the business, ability to reach more potential customers, access to regional or global markets, easier and faster to serve the customers, customers' ability to access the business on a 34/7 basis, better prices to customers, enhanced collection of customer data, higher quality customer service, increased business visibility through search engine marketing and convenience to customers.

The study found that around 63 per cent of online business are still in the startup stage. Around 74 per cent attract less than one lakh unique visitors to their websites and a further 79 per cent attract less than one lakh of repeat visitors and 74 per cent have revenues below IM KES per month and 79 per cent serve less than one thousand customers per month. The current performance of these businesses pale in comparison to similar businesses in developed economies. There was positive correlation between C2C business model and the performance in terms of unique and repeat visitors to the website. Further, the nature of the product in this case-information and payment mechanism are good predictors of this relationship. Kabuba (2014) has recommended that in order to improve the customer trust in online businesses the business owners need to invest in the requisite technology and systems to secure their customers and their business as well as create consumer awareness to negate this poor perception on the E-Commerce.

On the other hand, the Government need to invest in the enactment of laws and regulatory infrastructure that supports online shopping. Most importantly Kenyan consumers have to be more willingly purchase the products and services online.

5. Summary

E- Commerce Development is in infant stage in Kenya. Its transformation to promote B2B and B2C depends on the intervention of the Government machinery through its appropriate policies and regulations for the entry of many more operators of E-Commerce. More awareness creation exercise to the customers either through E-Commerce education or through E-Commerce conferences will definitely promote the opportunities and Kenya should listen to the E-Commerce developments in the developed world and should translate those experiences for better implementation in Kenya.

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Chapter - 5

Prospects of E-Commerce in Bangladesh

Dr. Md. Mostafizur Rahman

Abstract

This paper aims to examine the present scenario and prospects of E-Commerce in Bangladesh. It is based on the various research studies carried out on E-Commerce. The internet has uncovered a new window of business platforms, which is commonly known as E-Commerce. It is the process through which the buying, selling, dealing, ordering and paying for the goods and services are done over the internet. In this type of online commercial transaction, the seller can communicate with the buyer without having a face to face interaction. In the economy of Bangladesh, E-Commerce industry has a subtle contribution as the internet penetration percentage in Bangladesh has reached around 13.20 per cent. So it's quite a bit noticeable that customers are nowadays using the online platform to buy their desired products For the result, E-Commerce in Bangladesh has been growing at a tremendous level. At present more than one hundred E-Commerce websites are in the list of current members of E-CAB (E-Commerce Association of Bangladesh). The Government has taken various measures to make available different facilities to extend the practice of E-Commerce. The scope for improving the business structure and increasing productivity by using E-Commerce is much larger in Bangladesh.

Key Words: E-Commerce,

1. Introduction

E-Commerce is an abbreviation used for electronic commerce. It is the process through which the buying, selling, dealing, ordering and paying for the goods and services are done over the internet. In this type of online commercial transaction, the seller can communicate with the buyer without having a face to face interaction. Some examples of real world application of E-Commerce are online banking, online shopping, online ticket booking, social networking, etc. The basic requirement of E-Commerce is a website. The marketing, advertising, selling and conducting transactions are done

with the help of internet. Any monetary transaction, which is done with the help of electronic media, is E-Commerce. This paper has analyzed the present scenario and prospects of E-Commerce in Bangladesh. Internet users in Bangladesh crossed 77 million marks as the first eight months of 2017. BTRC officials said the number of internet subscribers have crossed 91.194 million in September 2018. There were 3.5 billion internet users around the world in 2016. About 45 per cent of the global population accessed the internet in 2016. Most of the internet users across the globe are located in South and East Asia. China had over 721 million internet users in 2016; it was more than double the amount of third ranked U.S. with nearly 290 million internet users. India ranked second in the number of internet users; Brazil and Japan placed in the top 5 (https://www.statista.com/). This paper is to examine the present scenario and prospects of E-Commerce in Bangladesh. This chapter is an outcome by analyzing various research studies and its reports carried out on E-Commerce.

2. Present Scenario of E-Commerce

2.1. E-Commerce in Bangladesh

E-Commerce started in Bangladesh in the late 1990s. The earlier E-Commerce sites were actually gift sites targeted towards the Non-Residential-Bangladeshis (NRB) living abroad. All the sites were based in abroad and had branches in Bangladesh. During 2000 to 2008, the E-Commerce sector observed slow growth. There were few E-Commerce websites but there was no system for online transaction which was the first condition for E-Commerce. In addition, high cost of internet and low penetration meant that few people knew about these sites. According to Bangladesh Bank, payments and transactions by credit cards were nearly Tk11 billion in June 2008; one of the lowest in the world. The country had only about 400,000 credit card holders at the end of June 2009. From 2008, things started to look bright as Bangladesh Bank took various initiatives including implementation of e-Payment Gateway. The real change came in 2009 when Bangladesh Bank allowed online payment in the country thus, officially opening up the E-Commerce sector. Another major incident of 2009 was introduction of WiMax internet in Bangladesh. It became quite popular in the country. The year 2013 had been an important year in the history of E-Commerce in Bangladesh. First, Bangladesh Association of Software and Information Services (BASIS) and Bangladesh Bank jointly observed "E-Commerce Week" for the first time in the country, supported by ICT Business Promotion Council. From January 5 to January 11, 2013 there were four round table discussions, two seminars, one technical session, special

awareness program at Dhaka University and a special promotional campaign at Bashundhara Shopping Mall. In February 2013, for the first time in the country, Computer Jagat, the leading ICT magazine of Bangladesh, under the supervision of Dhaka DC Office, organized the first fair on E-Commerce. The three-day fair took place from February 7 to February 9 at the premise of Begum Sufia Kamal National Public Library. The slogan of the fair was- "Festival for buying and selling at your premise." A total of 31 public and private E-Commerce organizations showcased their products and services at the fair. Though first of its kind, the fair was a huge success attracting eighty thousand visitors. Computer Jagat also did live webcast of the fair which was seen by more than fifty thousand people in Bangladesh and abroad. Following the first ever E-Commerce Fair at Dhaka, Computer Jagat arranged E-Commerce Fair at Sylhet, Chittagong, London and Barisal with their partners and participants. Additionally, Bangladesh Bank gave permission to buy products and services online using international credit cards. Buying products and services from abroad using credit card is an important aspect of E-Commerce. Currently, three types of E-Commerce are popular in Bangladesh (http://e-cab.net/). They are-

- Business-to-Business (B-2-B)
- Business-to-Consumer (B-2-C)
- Consumer-to-Consumer (C-2-C)

2.2. E-Commerce in Different Sectors of Bangladesh

Though being an under developed country, selected segments of the Bangladeshi business community has embraced technology with reasonable success. Personal computers and the Internet are also emerging as day-to-day business tools. These positive indicators are favoring the prospects of E-Commerce in Bangladesh. Some sectors are given below- Ready Made Garments (RMG), Banking sectors (Online Banking), online Shopping, Web Hosting, Domain, Online cards, gifts. Oil and Gas sector etc. Online Transportation System, Hotel Management and Tourism etc. (Mohiuddin, 2014)

2.3. Top 10 E-Commerce Websites in Bangladesh

In the economy of Bangladesh, E-Commerce industry has a subtle contribution as the internet penetration percentage in Bangladesh has reached around 13.20 per cent. So it is noticeable that customers are nowadays using the online platform to buy their desired products. For the result, E-Commerce in Bangladesh has been growing at a tremendous level. This ranking has been

considered by the survey of Social bakers and Alexa– the platform to survey websites ranking.

2.3.1. Rokomari.com

Rokomari.com is an online book-selling company having all kind of book in storage. This is one of the renowned E-Commerce based companies in Bangladesh which started its journey on 19th January 2012 with books. Now along with the books, it has included computer accessories and thinking to include fashion accessories on their product list. It also provides the attractive discount policy up to 20 per cent in terms of purchasing product and takes only Tk.30 as shipping charge on any amount of purchase. According to Social bakers, Rokomari is the 1st top rated E-Commerce business having 20, 41,227 likes on Facebook. This is also 228th ranked E-Commerce company in Bangladesh and 55430th in global and also improved up to 2,286 positions in last 3 months, according to Alexa.

2.3.2. Daraz.com

Daraz.com is an international online fashion shopping platform which offers international products to the consumers. It started its journey in Bangladesh in March 2015 and the sister company of Rocket Internet. It has a massive collection of international and National brands. It also gives free return opportunity in terms of purchasing products. Sometimes it announces some big deals for customers. It gives an opportunity for various payment options such as debit / credit cards, cash on delivery, bkash etc. to their buyers.

2.3.3. Ajkerdeal.com

Ajkerdeal.com is the market place where buyers can easily find their daily needs. It offers the products at a cheap cost to their buyers. It sells fashion and beauty accessories and electronics appliances along with other households' daily needs. Besides all types of payment method, it gives the EMI opportunity too. The sister company Ajkerdeal is bdjobs- the largest job site in Bangladesh and ran as a business from 19th November, 2011

2.3.4. Pickaboo.com

Pickaboo.com is the most recent popular E-Commerce shop in Bangladesh and this journey had been started in 2016. Despite being new in the journey, it has reached a significant level of success and ranked 5th in terms of popularity, according to Social baker. It sells the trendy electronics appliances on its product list. Now there is no need to go out or look for the best electronics products. Pickaboo.com is promised to reach the authentic product to our doorsteps.

2.3.5. Bagdoom.com

Bagdoom.com is the first entered E-Commerce company in Bangladesh. It has replaced the name by Bagdoom from Akhoni.com and colloquially it's called by "Bagdoom generation". It started its journey in 2010 to offer lifestyle products across the country at a minimal rate. It has various types of products which are from both national and international brands. Bagdoom's focused target market is mainly youth besides all kinds of people. Whether you are a fashion-loving person and want to live a luxurious life or like traditional stuff, Bagdoom is here to give you the perfect product to make your life colorful.

2.3.6. Othoba.com

According to Socialbaker, othoba.com is the 5th most popular E-Commerce business in Bangladesh. It started walking down the business allay from 15th November 2015 officially. This is the sister concerned company of PRAN-RFL Group. This company is committed to delivering various kinds of products such as fashion accessories, food and groceries, electronics products, health care kits, sport and gift items etc. in your doorstep.

2.3.7. Kiksha.com

In 2012, kiksha.com had started its journey by the name "Biponee.com". Now it's one of the most popular online shopping platforms. It has gained 7th position and striving level best to reach the peak in the E-Commerce business arena, depicted by the survey of socialbaker. Kiksha is also providing the home and kitchen appliances, lifestyle and electronics products, gifts etc. to their customer to make their life easy and convenient. It is also aiming to decrease the stress from their busy life giving the product to their doorstep.

2.3.8. Priyoshop.com

Priyoshop.com is the leading retail online shopping company in Bangladesh which started the journey in 2013. It offers clothing products of top manufacturing brands and also has the electronics products to the customers.

2.3.9. Banglashoppers.com

Banglashoppers.com is a renowned online retailer and distributor of some international cosmetics, perfume and skin care brands. It started the journey in 2007 but that time the trend of E-Commerce was not as popular as these days. So they started their official operation again from 2013. Now, this is the 8th ranked E-Commerce business according to the survey. A Canadian company is acting to affiliate it from the very first time of the journey.

2.3.10. ClickBD.com

Clickbd.com is such kind of company which has the option not only buying the product but also selling through the online platform. Many people, especially students can sell their product and make a profit from it. This is the most visited website in the E-Commerce sector. It has started its journey from 2005 but recently this has been the most popular than its previous time. It offers various kinds of products like electronics and computer appliances, fashion accessories and traveling kits etc.

Among all the top 10 companies, there are some companies who are promised, dedicated and growing company similar to techshopbd.com, hutbazar.com, iferi.com are some companies which are elevating their position day by day. Ali *et al.* (2016) found that there are some drivers of e-business in our country. It was mentioned as SLEPT drivers or factors.

1. **Social Drivers:** Social drivers include literacy rate, culture, and interest of people to adapt to new innovative products.

2. **Legal and Ethical Drivers:** Determine the method by which products can be promoted and sold online, Governments, on behalf of the society; seek to safeguard an individual rights to privacy

3. **Economic Drivers:** Economic drivers include income of people, standard of living, and cost of e-marketing.

4. **Political Drivers:** National Governments and transnational organization have an important role in determining the future adaptation and control of the internet by which it is governed.

5. **Technological Drivers:** This includes type of technologies used, cost of using internet, connection speed, number of internet connections, curiosity to accept new technologies.

3. Prospects of E-Commerce in Bangladesh

The E-Commerce sector of Bangladesh is expected to grow at 70 per cent in 2017 as the rollout of 3G internet 3-4 years back led to rapid adoption of online shopping. The size of Bangladesh's E-Commerce market is estimated to be $110-115 million in 2017, growing from $65-70 million in 2016. The E-Commerce size is still a mere 0.7 per cent of the country's total retail market. Rocket internet-backed online market place Daraz, Foxconn-backed e-retailer Pickaboo, Bagdoom and Chaldal are among the leading startups in the country. Internet penetration to 40 per cent of Bangladesh's 165-million population has bolstered the growth of local E-Commerce, F-commerce (merchants conducting online business through

Facebook pages) and E-grocery startups. The size of Bangladesh's E-grocery market is much smaller at $4-5 million, or about 0.03 per cent of the country's overall grocery market.

Analysts are predicting that Bangladesh's E-Commerce market will surge to $20 billion by 2020. Bangladesh's E-Commerce market is nascent but growing similar to what India was probably seven years ago. It's a good time for E-Commerce players to be entering. Daraz, founded in 2015, dominates Bangladesh's E-Commerce market, selling electronics, mobile phones, large appliances and apparel. The company is growing at double-digit percentages every month, supplying to customers in neighboring markets of Pakistan, Sri Lanka, Nepal and Myanmar.

The opportunity in Bangladesh prompted Delhi-based digital marketing company MoMagic Technologies to launch Pickaboo last year. Arun Gupta, Chief Executive of MoMagic, said that the Bangladesh E-Commerce market is close to five years behind the Indian E-Commerce market and is around 10-12 per cent of the size of the Indian E-Commerce market. Pickaboo, which clocks monthly revenues of $6,00,000, mostly sells electronics on its controlled marketplace and has plans to add leather accessories shortly. In addition, Pickaboo has a 20 per cent share of Bangladesh's E-Commerce market. When Flip kart was launched, they started selling books first— a category where, what customer sees on the marketplace and what customer receives is the same. In today's world, electronics fall under this category with the probability of difference being low. International Finance Corporation, the private sector lending and investment arm of the World Bank, has been tracking Bangladesh's entrepreneurial ecosystem during the past one year and is bullish about the market. In its shortlisted 43 startups which they are actively monitoring, Chaldal tops the list as a potential investee company. Chaldal delivers groceries using a network of small warehouses spread across Dhaka. Chaldal competes with Direct Fresh and Meena Click, the online extension of Bangladesh's 15-year-old supermarket chain, Meena Bazaar. It is specializing in groceries and personal care products, Meena Click was launched three years ago. The company, which handles 4,000-4,500 orders a month in Dhaka and the port city of Chittagong, said it has doubled its business over the past year. Another aspect about this nascent E-Commerce market is that of the total online spending by customers, which is estimated to be about $50 million, 40 per cent of the transactions are through 15,000 small merchants selling through their Facebook pages.

Bangladesh's E-Commerce ecosystem, instead of developing around

one or two big players, has several smaller merchants who sell online,' said Ruchira Shukla, Regional Head, South Asia, venture capital at IFC. Bangladesh also has the advantage of a large and homogenous population of 165 million. Because of this, once the business model is figured out, it can be scaled across several cities and the entrepreneur doesn't have to worry about differences in language or culture. The market is fraught with several other challenges too. Logistics and the transportation system are still challenges in Bangladesh. Also, the stagnant traffic hampers fast delivery of products. The Chaldal team rented out a small grocery for two hours to click pictures of all the items it stocked to build their online catalogue. Another big challenge lies in how to turn around the market despite a shortage of capital. This has forced some companies to resort to capital-efficiency to survive. (http://www.newagebd.net/)

4. Summary

With the advent of fast internet connections in our country, the E-Commerce sector has boomed. Every day, a huge number of transactions occur as businesses conduct their operations without even meeting their clients face to face. E-business has changed many traditional mode of transaction and brought revolutionary change in the economy. People are now improving their standard of living using internet. Many traditional mode of communication like facsimile, analogue phone's uses have been decreased. Suppliers can now increase the order by taking online ordering and business customers can save much of their time by doing online transactions. In Bangladesh, many organizations are introducing online payment system such as B-Kash system of BRAC organization. So that, people can send money to their relative and it has made their life easy. Banglalink introduced E-Ticketing system to avoid many transportation hurdles. Much of business activities of large companies as well as super markets are using website to receive orders from customers and sending particular products to customers. Now, in Bangladesh, business customers are increasing their sales, sales revenue, market share by giving many promotion and advertisement in online. Government has to handle many problems in terms of online transactions done by business customers who do not understand the online system. Government should take measures to improve e-business in Bangladesh like increasing technically efficient people who can give training to business people to transact online, increasing investment in hardware and software and so on.

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Chapter - 6

History of Chinese E-Commerce: A Tentative Framework

Zhou Deyi and Cao Shilong

Abstract
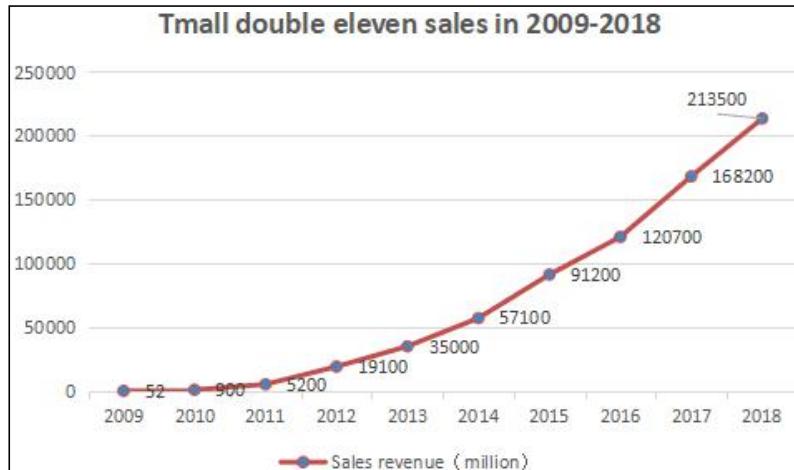
Chinese E-Commerce experiences rapid growth and becomes the leader in the world because of enhanced connectivity and user penetration. This has facilitated the E-Commerce Trade. The nature of trade or transaction is realization of money on sale of commodity or service. In this process, there are production cost and transaction costs. This is discussed through the Transaction Cost Theory. During the internet era, network is huge. With decreasing information cost, people are finding easy ways to build connection with strangers which may coordinate themselves spontaneously and generate massive "internet wave" together. Besides, these other theories related to E-Commerce development and infrastructure building in China are also discussed in this Chapter.

Key Words: Transaction Cost Theory; Evolutionary Theory; T-Mall

1. Introduction

In the past decades, Chinese E-Commerce experiences rapid growth and becomes the leader (Number One) in the world, although China's internet is not the most developed. In 2018, one day's sale (213.50 billion RMB or $30.75 Billion) on one biggest E-Commerce platform T-Mall is almost the whole year GDP of one small country, like Latvia ($30.264 Billion, 2017), Nepal ($24.472 Billion, 2017).

So the questions arise. Why does Chinese E-Commerce develop so fast while internet in China is not the most developed? Is it unique, misshapen monster in Chinese environment? Or is there any universal logic behind the part or whole Chinese E-Commerce story? Can Chinese story be copies in other countries? What can Chinese experience provide suggestions for other E-Commerce less developed countries? This Chapter is going to provide a tentative conceptual framework to understand this unique phenomenon without much empirical data.

Fig 1: Sales on T-Mall in a Single Day from 2009 to 2018.

2. The Theories Behind the Development

To explain the E-Commerce development, three important theories might be employed.

2.1. Transaction Cost Theory (TCT)

First, the transaction cost theory may be helpful to explain the uprising of E-Commerce in China. According to the transaction cost economics, the total cost of society includes two parts: production cost and transaction cost. The transaction cost is the coordination cost among the people involved in the production and transaction. Production cost is the cost that deals with nature. In principle one person world (like Robinson's island) only has production cost, there is no coordination among people. One person economics is easy and can be taught with one hour. When Mr. Friday reached, the world became more complicated. Economics about two person's world is still unclear. Although we can define the transaction cost in this way, the operationalization of concept is much complex. Sometimes transaction cost and production cost are intertwined. Hard to differentiate. Given the anthropocentric nature of cost, all cost are essentially transaction cost, and all transaction cost are in nature information cost. Researchers often define the concept according to their research convenience. We will also give our convenient definition below.

The nature of trade or transaction is realization of money on sale of commodity or service. In this process, there are production cost and transaction costs.

The consumer surplus from a transaction is the value of the products for the consumer (Vc) minus the payment (Pb) and the transaction cost incurred (Tc). Here Tc refers to the information searching cost, price negotiation cost, travel time used, quality checking etc.

The seller surplus of a transaction equals the price (Pb) minus the transaction cost incurred (Ts) and the purchasing price from the suppliers (Ps). Here, Ts refers to Sellers' waiting time, shop rent, negotiation cost, transportation cost of products, etc.

The total social surplus of the transaction = Vc-Pb-Ps-Tc-Ts.

Under this framework, a new technology or new business model can survive only when it can save the cost and generate more social surplus.

2.2. Increasing Return of Network and Technology (knowledge) Application

The second theory with network economics, which is more complicated, involving the knowledge, scale of economy (diminishing marginal cost) and economy of scope. During the internet era, network is huge. With decreasing information cost, people are easily to build connection with strangers which may coordinate themselves spontaneously and generate massive "internet wave" together.

There is an empirical law, the value of the network is equal to the square of the connection (people) number in the network. Since China has 800 million smart phone users, this is the biggest network in the world.

2.2.1. How the Bigger Network Can Generate More Value?

One reason might be the network externality, like telephone network. The new comer will increase the value of the phone for everybody in the network since the phone has more connection channels. Another way to see network externality is that if all of your friends use We-chat, you have to use We-chat rather than Facebook although the later may have better service.

Another reason may involve the diminishing marginal cost. This is relevant to economy of scale, economy of scope. When network infrastructure is there, the marginal user or function generates little cost. There is a saying: after all, the wool comes from the sheep's back—in the end, you have to pay for whatever you get there is no free lunch. Now the new logic of internet is "the wool may come from the pig's back—in the end, someone may to pay for whatever you get; there is "free lunch" sometime. This phenomenon may attribute to the economy of scope.

The first one and second one might be relevant, the two sides of one coin.

The third reason of network might be the diverse heterogeneous knowledge in the network. The network is the repertory of diverse knowledge which obey the law of increasing marginal return. A bigger network may provide more information and knowledge and physical resources.

The network may be the logistic network, social network or internet network. In the internet based economy, network is much bigger and more powerful. The competition in 21st century is the competition among the networks, platform and ecosystem.
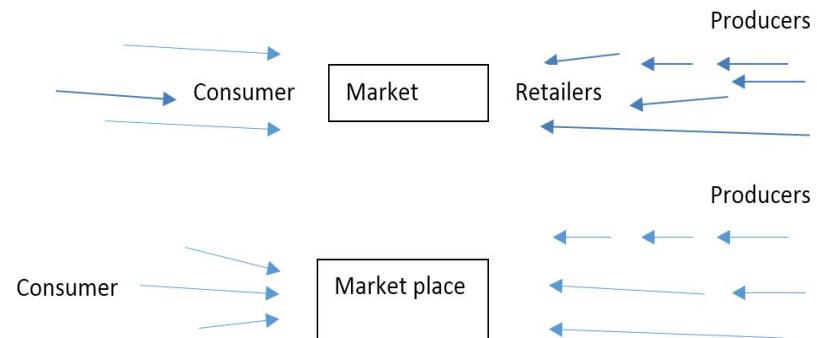
2.3. Evolutionary Theory

The third relevant theory may involve evolutionary theory. Its logic system is not as mature as classical economics. With regard to evolution, some concepts like mutation, creative destruction, and habit and path dependence are important. Big network may have big possibility to generate mutation (novel knowledge). Especially complementary knowledge and resources in the big network may generate novel combinations that might be impossible otherwise. The central topic of evolutionary economics is knowledge innovation. Habit is one kind and often more important of knowledge. More changeable habit in internet is important element for understand the consumer behavior in internet.

3. The Explanation of E-Commerce Development in China

How can we use these three theories to explain the Chinese E-Commerce development? We may start from process analysis of the trade.

3.1 The Typical Traditional Trade

Fig 1 A: Typical Traditional Trade

The traditional business process can be characterized as "commodity first and information second", and there are multiple stage from producers to consumers. Due to the physical constraints, fewer consumer are accessible to the physical market products and service.

The retailers buy products from suppliers of multiple stages of the supply chain. They put the commodity in the market at first, and wait for the consumers.

Based on This Business Model, We Can Divide the Transaction Cost into Two Aspects

- Consumer Transaction Cost and
- Sellers' Transaction Cost,

Consumer Transaction Cost: (Tc) includes information searching cost (distance/time, transportation tickets, congestion discomfort, and physical energy), negotiation and trust (quality, payment), service and products delivery time, etc.
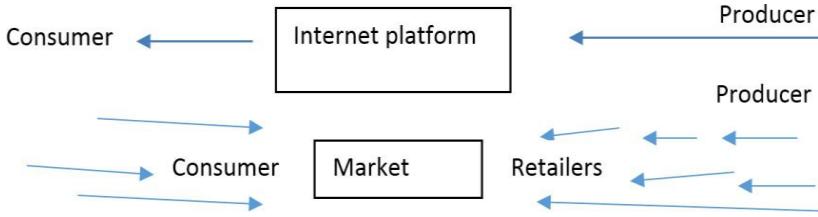
Supplier Transaction Cost: (Ts) includes middle men's transaction cost plus retailer coordinating cost (involving time, labor, house rent, flow of capital, trust and transportation cost).

Retailers are the coordinators for different customers from different time and places. They also collect the information of consumers and send to their suppliers by order. Retailers with superior location will catch more consumer attention. Middlemen are the coordinator for both suppliers and buyers from different time and place. Price, payment condition negotiation and quality measurement cost is huge. If a new business model can appear, it must save the total transaction cost.

3.2. The Evolution of E-Commerce in China

3.2.1. First Generation of E-Commerce (Taobao Generation)

Taobao means "searching for the treasure". It is an internet platform or E-supermarket. There are three basic elements for E-Commerce: Alipay, Logistics and Internet. E-Commerce can be characterized as "Information First and Commodity Second", and the logistic system will provide one stage or less stages delivery to replace multiple stages of supply chain and cut the transactions in between. And there is no physical barrier for any internet users to access to the products and services online.

Fig 2: The First Generation of Supermarket

Why Does E-Commerce Outperform the Traditional Business Model? The Main Reasons may be two

- The Economy of Scale,
- Direct sale to reduce the Middlemen Transaction Cost.

With the introduction of internet (mutation), the information cost has been cut greatly. This causes the dis-equilibrium of cost structure and triggers the adaptation of logistics and re-engineering of traditional business model. The E-Commerce changes the sequence of trade and even production. Internet acts as the media to coordinate the demand of different customers in different time and place. Buyers and sellers can negotiate and reach agreement at first, and the commodity transportation and delivery come at second. In some manufacturing factory, like Xiaomi cellphone, consumers can even participate in product design. The new logistics system is developed to adapt to the change of business pattern. Middlemen have been removed and stock of retailers have been cut greatly. Consumers' trip to the market and the commodity transportation have been replaced by new logistic system, reducing the consumers' travel cost to the market. Individual package has been sent to consumer directly from producers.

Just like the production factor substitution that use the cheaper production factors to replace the expensive factors, the re-engineering of business process is the response to the information cost reduction.

The essential part of E-Commerce is to rely on the internet information and the time delay of products or service delivery to cut the stock cost and middlemen, and enjoy the scale of economy due to the accessibility of larger number of consumers.

However, this re-engineering process and economic logic is general, should be true for all of the world. What makes Chinese E-Commerce more successful and unique? The seven elements below are most important.

3.2.1.1. Huge Internet User Network

China has the biggest internet users in the world. They are potential customers for business. Even small proportion of them and small profit from each of them will generate huge wealth, which not only give the motivation for companies to enter and survive in this area, but also give them the resources to improve their technologies. Furthermore, the logistic system itself has the huge fixed cost which should be shared by many customers. There is the diminishing marginal cost. Bigger network will be more competitive.

3.2.1.2. Zhai Generation

Due to one child policy, the younger generation, especially so-called 90 generation, has two characters. They have the purchasing power, all family savings and overflow of love from mother goes to them. They are also keen to learn and good at internet skill. They hate to do physical work (even go shopping) and love to stay at home with computer and mobile phone all time ("Zhai girls or Zhai boys" in Chinese). And due to the crazy Gaokao (University Entrance Examination) most of them lose the interest in study. Purchasing is a way to release the pressure and a hobby, balancing the boring study in the school. Online purchase gives them easy way to realize their distorted desire. Furthermore, E-Commerce companies "burn" money to shape young generation purchase habit.

3.2.1.3. Shopping Ladies

Chinese housewives are unique. They are open to new information technologies and love shopping. And they are "Finance Minister" of the family, controlling most of the family income, and are responsible for family purchase. The easy purchase process of E-Commerce makes them very active in internet (Mai mai mai in Chinese, or buy Buy buy in English). There is a saying: behind the successful man, there is always great woman. But now it becomes "Behind the great man (Jackma), there are 10 family bankrupting or Spendthrift women."

While shopping ladies and Zhai generation form the basic scale of network for E-Commerce, old generation are free riders taking advantage of the decreasing marginal cost of network, driving the cost of E-Commerce down further. As a collective society people love to discuss and share their shopping experience and expand the network rapidly.

3.2.1.4. High Rent of Shop

Due to the bizarre land policy of Chinese Government, the house in city

is costly. This makes the offline business less competitive, this gives unique opportunity for E-Commerce to develop.

3.2.1.5. Alipay System

The trust level in Chinese society is very low, even the offline face-to-face trades often face cheating in price and quality. People spend searching cost and negotiation cost to avoid cheating. As regard to E-Commerce, due to the spacious separation between sellers and buyers, E-Commerce must solve the trust issue with regard to quality and payment issue. The Alipay system is innovative solution for solving trust issue in E-Commerce.

Alipay is the third part based payment system. Only when consumer pay the bill to the third part (keep in the third part), sellers will send out the products. And only when consumers confirm the acceptance of the products, the sellers can get the money from the third part. This payment system is unique Chinese governance mechanism for trust deficit business environment. It provides the punishment (or threat) mechanism against the sellers. If the quality or price of products is not satisfied, consumers will return the products. In this case both will lose in term of logistic fee and package fee and time used. The delivery time also give consumers the chance to rethink their purchase decision and avoid the impulsive purchase. During the Singles Day, there are high percentage of sales return (6 per cent from T-Mall in 2018). Alipay solution generates even higher trust level and makes online trade is more reliable than face to face deal in off line shop.

3.2.1.6. Lower Cost of Logistic System

Logistic system is an indispensable part for E-Commerce. In 1990s Chinese Government started to allow private companies to provide logistic service which was monopolized by China Post. There is already a huge logistics and transportation system in the industry. A few years later many logistic giants like Shunfeng, JD, Yuantong, Shentong, etc., thrive and the network expand to all towns of China. The logistic system use the labor work's time to replace the consumers' time, cutting the consumers' transportation to the market. Kuaidi boys (logistic man) are usually hard working, provide relative low cost logistic services.

3.2.1.5. Governmental Support

In recent years, Chinese Government is encouraging the innovation initiatives, especially internet based innovation. Thus Alipay and logistic system can thrive. These Chinese factors together with general principles may help to create unique E-Commerce miracle in China.

3.2.2. Second Generation of E-Commerce

The first generation E-Commerce can't provide on-the-spot experience and personalized service. Meanwhile, due to the open access to internet for everyone and fixed number of internet users, the supply sides expand much faster than the demand side. Internet become "crowded", Internet traffic (click) becomes scarce, and consumer attention and viscosity become more important. There comes so-called second generation of E-Commerce, competing for the customers' attention.

3.2.2.1. Trust and T-Mall

Since low quality and cheap products in Taobao can't meet the demand of customers with higher income, Alibaba open a new platform called T-Mall with additional governance mechanism for product quality assurance. It requires all the online shop owners pay certain amount of money as mortgage, thus set a doorsill, only bigger shop keeper can enter the T-Mall platform. By this way, product quality in T-Mall is much better from Taobao. The new governance mechanism is efficient in reducing the transaction cost with regard to the quality issue.

3.2.2.2. Community or Fans Economy

Now internet flow is enormous but no takers. Competing for the attention of customer, platform or online shop use different ways to attract the internet flow. They called this as "Community" construction. The strategies include internet celebrity (this becomes a new occupation), online-offline integration, APP and consumer merchant to increase customer viscosity like Mr. Hippo (Hema Xiansheng) and OFO. App is an important tool to shape customers' habit. Since consumers take time to learn and adapt to new APP operation, the company usually need "burn" money until consumers are locked in, after that the company may start to harvest in some way. Didi is a good example. Some consumers act as the middle man, use their social network to promote the group purchase. This kind of consumer is called Consumer merchant. Network based competition push all network to optimize their operation, like automation and integration) and extension of logistics.

Pingduoduoduo is a special and interesting and successful case for community construction. It uses low price to attract customers to purchase together, greatly reducing the package and logistics cost. Community construction and logistics cost cutting work together.

3.2.2.3. Diminishing Marginal Cost and Scope Economy

Now the E-Commerce is almost involve in all business in some way. Alipay becomes a bank and credit evaluation institute. Cainiao integrated all the distribution ends of almost all logistic companies and acted as the station for consumer information collection and coordination, receiving the order from their customers for group purchase. The former competitive E-Commerce market evolves to be the monopsony (e.g., We-chat group business) or incomplete market (Jingdong and Alibaba). To transform the internet flow to be real purchasing power, precision marketing is important, thus creates the demand for the big data mining. Data has its value. Once there are data, customized personal services and large scale personalized production become possible.

In general, second generation of E-Commerce faces tough competitions for customers' attention, provides more customized service and quality products. While the first generation comes out from the competition between online shops and off line shops, the second generation of E-Commerce is the result of competition among online shops and offline shops. But the logic behind is not that much different. Scale and scope economy of network, network based innovation, information based transaction cost reduction, habit shaping and evolution, these forces work together in different ways to generate different forms of E-Commerce.

Fig 3: New Retailer: Online Off-Line Combination

4. The Propositions, Predictions and Hypotheses

Back to our questions in the introduction, we have following answer: behind Chinese miracle in E-Commerce, there are some universal common logics that are true for all of the world, and which are the main driving forces for Chinese E-Commerce development. At the same time, some unique Characters of Chinese society may contribute to the faster development. We summarize our analyses and explanation as follows:

1) Information relevant transaction cost reduction and re-engineering of traditional business process (and delay of delivery) are important driving force for E-Commerce development.

All businesses can be E-Commerce, because all businesses involve information. In the future online and offline are more integrated. If the information cost is higher in one transaction, this transaction will be more suitable for E-Commerce. The pioneer of products or services in E-Commerce usually have no urgent delivery requirement, or no delivery at all (just information transfer service like books tickets, money transfer, distance education, etc.).

2) The scope economy and scale economy of huge network are another driving forces for Chinese E-Commerce. High population density and huge population give China a competitive advantage. With decreasing marginal cost, bigger becomes bigger. As the result, fewer companies will dominate the area, industry concentration become more serious. With E-Commerce, the globalization will be faster and more complete. In some area, the whole world can only accommodate one network. Made in internet. Winners take all.

3) People or countries in different networks may lead to the different future. Information gap may be transformed to be development gap. Increasing return of information technology drives China into information society (compare with agricultural society, industrialization society), in which data, information, knowledge, attention are more scarce than energy, material, capital. Consumers' life style and production mode are much different, sometimes hard to be understood from other societies.

4) Enthusiastic Zhai generation and active shopping ladies, high rent of offline shop, huge and uniform market and internet users, governmental support, developed and cheap logistic system are unique Chinese characters that push E-Commerce to grow faster and bigger.

5) Habit and Path dependence evolution play an important in internet based E-Commerce. Together with diminishing marginal cost of network, path dependence evolution may lock the whole world in low efficiency.

These propositions should subject to the further empirical examination.

5. The Implication for other Countries

1) Internet development, logistics and payment system are three key technical requirements for E-Commerce development.

2) Packaging and Environmental Issue

The individual package and delivery Logistic system may generate more value, but may not reduce the transportation cost of society. Its net effect for energy use and CO_2 emission and road congestion are not known. Package pollution from E-Commerce is a disaster in China.

1) Start from the easy products that E-Commerce will cut a big share of transaction cost.

Choose the Information relevant business with less requirement on logistics, like booking ticket, payment service and E-book reading service. E-Commerce is more important for high value standardized commodities without urgent delivery requirement.

2) Online and offline integration. Group purchase based E-Commerce will be developed easier than burgeoning country.

3) Focus on younger generation and female purchasing power who are more vulnerable to internet.

4) Bigger economy with huge network can develop their own E-Commerce while small economy may introduce or connect with the network from other countries that is mature.

Scale threshold requirement of network is hard to be satisfied in small countries, the E-Commerce development from these countries should be introduced.

5) Never forget the original goal and rethink of our final destination taking human being as a whole.

6. Summary

This chapter has addressed the theories behind the E-Commerce development in China. The Second generation of E-Commerce faces tough competitions for customers' attention, provides more customized service and quality products. While the first generation comes out from the competition between online shops and off line shops, the second generation of E-Commerce is the result of competition among online shops and offline shops. But the logic behind is not that much different. Scale and scope of economy of network, network based innovation, information based transaction cost reduction, habit shaping and evolution, these forces work together in different ways to generate different forms of E-Commerce. Amidst all these development in E-Commerce, Package pollution from E-Commerce is a disaster in China and hence China should come forward to find the environment friendly package materials and the same should be placed in identified location for its decomposition in a natural setting.

Chapter - 7

Challenges and Prospects of E-Commerce in Pakistan

Dr. Umar Ijaz Ahmed

Abstract

Increased usage of Smartphone in Pakistan has indirectly motivating the internet penetration in an appreciable manner. With the growing internet infrastructure facilities and internet users, the E-Commerce industry is progressing in a big way resulted in demand of payment options among the consumers. The State Bank of Pakistan made a big efforts in facilitating the prepayment options. In Pakistan, most of the transactions are done by Cash on Delivery (COD). It is analyzed that the customers are more likely to pay for higher value orders through prepayment and less valued orders through COD. Besides, the challenges faced by the E-Commerce industry, present status of E-Commerce and futuristic aspects of E-Commerce of Pakistan are also discussed in this Chapter.

Key Words: Cash on Delivery; Information Communication Technology; Challenges; Present Trends

1. Introduction

In technologically advanced and modern era of communication, doing business is easier and more competitive through E-Commerce or Electronic Commerce. The rapid growth and advancement in Information and Communication Technology (ICT) and internet usage shift the world towards E-Commerce. It not only gives boost and revolution in people's lifestyle but also in the business and marketing strategies of the business firms. E-Commerce is an environment, in which a company makes, sustains and heightens business relations with customers and other businesses using tools and practices involving internet technology. E-Commerce is an information technology trend which is emerging fast in the business world. It covers buying, selling, marketing, communicating buyers and sellers with digital cash and transfer of data between companies using internet online facility.

With the growing internet facilities and internet users, the E-Commerce

industry is progressing in a big way. Currently about 44 million broadband users in Pakistan and E-Commerce industry valued at $ 3100 million. Whereas, China's at $ 466 billion and European Union's at $ 487 billion. In 2016, Pakistan was ranked at 105 out of 137 countries on the UNCTAD's B2C E-Commerce Index, which depicts readiness of countries to involve in online commerce (Aziz, 2017). E-Commerce offers an open playing field to all. Alibaba (Chinese E-Commerce Giant) does not have office in Pakistan but its business doing pretty well all over the Pakistan. Amazon 9E-retailer alone has sales volume of around $ 136 billion, which is six times of Pakistan's total E-sale's volume. According to Economic Survey of Pakistan, our wholesale and retail trade as a component of GDP is valued at S 20.54 billion (GOP, 2017).

There are only around 571 E-Commerce merchants in the country, which is a mere 0.44 per cent of physical retail stores (over 900.000) in the country (SBP, 2017). Most of the E-Commerce transaction in Pakistan is done on cash on delivery and usage of credit/debit cards is very low as only 36 million plastic cards have been issued so far. Due to the absence of International payment system providers like PayPal, Pakistani online traders facing difficulties in making purchases and exporters face issues in getting payments directly into their accounts in Pakistan. Tax matters also a critical factor in E-Commerce. Online marketers face uncertainty in quoting custom duty for their clients as the invoice value is often different from the FBR's assessed value. Sometimes, E-marketplace firms face double taxation in Pakistan as the laws are not well defined in this matter (Aziz, 2017).

2. Present Trends of E-Commerce

The low level of awareness among the people about E-Commerce and most of the customers thinks that online business is a risky activity and most of the people strongly believe on physical dealing. People are accustomed with traditional shopping. This trend is changing slowly, and businesses and customers have begun to shift to E-Commerce. The market share of E-Commerce is increasing on year on year basis and a race is begun among young Pakistani entrepreneurs that pushing the businesses to offer better services and driving up the number of customers. The Pakistani online E-Commerce market is appealing the interests of international investors, for example www.daraz.pk and www.azmalo.pk are some of the most popular and successful e-business sites developed by the Rocket Internet (GmBH), the world's the leading online venture builder.

According to State Bank of Pakistan, on an average, every prepayment

order in Pakistan had a basket size of more than Rs. 8,000 and each of 571 merchants processed about Rs. 17 million in prepayment orders. In Pakistan, most of the transactions are done by Cash on Delivery (COD). It is analyzed that the customers are more likely to pay for higher value orders through prepayment and less valued orders through COD. Yayvo.com for example has 60 per cent of its orders above Rs. 5000 were paid via prepayments and 76 per cent of its orders below Rs. 1500 paid via COD (SBP, 2017).

Table 1: E-Commerce Market Size in Pakistan

Metric Particulars	PKR	USD
E-Commerce Market Size in Pakistan (Prepayment)	9.80 Billions	$ 93 Million
Average Order Size (Prepayment)	8,167	$ 77.80
Average Revenue per Merchant (Prepayment)	17.20 Million	$ 163.50 K

Source: State Bank of Pakistan (2017)

Table 2: Revenue of Yayvo.com (Breakdown according to Payment Method-2017)

Order Value (PKR)	COD in Per Cent	Prepayment in Per Cent
0-2500	75.86	24.14
2500-5000	57.97	42.03
>5000	39.99	60.01

Source: State Bank of Pakistan (2017)

3. Challenges Faced By the E-Commerce Industry

Nevertheless, Pakistan has a lot of scope for E-Commerce, but faces enormous challenges. Most of the business firms prefer traditional way of doing business and believe that E-Commerce is a risky process. There are several reasons i.e. low internet usage, lack of technology, lack of awareness, poor payment methods, transport and infrastructure etc. Following are the major issues faced by E-Commerce websites in Pakistan.

3.1. Literacy Rate

Unfortunately, there is lot of proportion of Pakistani population that is illiterate and don't have knowhow about internet and its usage. Without the knowledge and awareness about the E-Commerce website, one cannot access or avail it. There is very small proportion of population having internet facility and even smaller proportion that would shop online. As the operating cost of online business is bit high and due to this problem, market volume shrinks even more.

3.2. Lack of Trust

E-Commerce and online shopping are somewhat new to the citizens of

Pakistan and its acceptance rate is growing up. People are willing to purchase online but the only hurdle is the lack of trust. Without taking a look physically at the product, they often drop their buying decision, unless it is a brand and have used several times in the past. People considers online shopping as time saver in many countries of the world but in Pakistan, even after a long search on the internet people would rather spend more time and go to take a look at the outlet as well.

3.3. Delivery and Cost

Less cost of business and consumer satisfaction are the major purpose on any E-Commerce business. It is quite fortune for businesses to run website, maintain inventory stock, market product and deliver the request. But the credibility maintenance is a major task and product delivery is a spoiler. Our transportation system is not reliable, and a business is employing the services of local transport companies, it cannot guarantee a time-based delivery to customers. With fewer sales, the transportation cost is much higher.

3.4. Payment Issues

Maximize profit is a motive of all the businesses but secure payment method and trust of consumers are major issues for online businesses. Online payment is preferred by most of the online businesses and E-Commerce websites in Pakistan, but customers wants to pay cash on delivery. This is because of the small proportion of population having credit cards. On the other side, people who do own a credit card, don't trust on website for their data safety unless it is a brand and they have dealt with before.

3.5. Nature of Public

There are other factors that will take time for Pakistan to change. Other than not trusting the online display and not trusting the online payment system, there is still a couple of more traits in the thinking of people that keep them away from online purchases. Generally, E-Commerce websites don't have product return/ exchanged or bargain policy and people in Pakistan are habituated to these practices. Therefore, people feel uncomfortable and insecure to accept fixed prices and to think that a useless item cannot be returned or replaced.

4. Prospects of E-Commerce in Pakistan

The world is progressively transmitting into global village and permits people and businesses to integrate and make good connections. Now there is no industry in isolation and compliances and partnerships within a business

and between different businesses have become a new corporate mantra. Among the most evolving and auspicious businesses of the future, E-Commerce is the one that observing enormous progress particularly in the developing countries like Pakistan for the past few years. E-Commerce has shown promising progress and expansion and has a lot of potential in becoming a major economic player and generating revenue. In Pakistan, E-Commerce industry is progressing but still is at infant stages.

With the total population of approximately about 195 million people in 2016, Pakistan is a South Asian country which is blessed with an enormous workforce as well as abundant natural resources. According to a recent survey, Pakistan is going to be one of the ten economies that will be contributing approximately $4.3 billion to the global GDP in the next ten years. Regardless of the challenges which Pakistan faces today, it has a bright future as many experts believe. There are many factors which contribute towards this positive future outlook.

- As the world economies facing the issue of aging population, Pakistan is seeming to be on a safer side as far as this issue is concerned because about 63 per cent of our population comprises of youth that has a significant important and become a major market of the international economic scenario. Labor force as a distinctive factor in the economic development of a country. The talented youth of Pakistan is getting employed in the developed world and providing a solution to the labor shortages which pestilence these economies.

- The initiation of small start-up businesses in Pakistan like Shahi Savari, Travly etc. started by fresh graduates and proved to be an encouragement for youth to take similar initiative and come up with fresh ideas relating to E-Commerce business. Keeping in view the huge potential in Pakistani market, several multinational companies started businesses in Pakistan like Uber, Jovago, Cream and like. Such start-up businesses frolicked major role in boosting economy as well as promoted local tourism.

- Due to the strategic location of the country, tourism industry has huge potential to untapped benefits and will be major contributor in GDP in the coming years. Pakistan and all four seasons and abundant natural beauty, which makes it a popular destination for international tourists. Pakistan is also home of jaw opening and beautiful hilly areas, deserts, glaciers, lakes, rivers, coastal areas

and many other attractive places. Furthermore, the evolving E-Commerce industry, which promote tourism through online hotel booking and other facilities will further add a cherry to cake.

- The internet usage is phenomenal in Pakistan and prove to be a gateway for this country in becoming more connected to the world. The innovative technology like 3G and 4G internet connection helped local businesses to portray well at international market. This provides online services which helps in enhancing connections to various stakeholders. The success of 3G and 4G, induces cellular companies to introduce 5G technology in near future. This will enhance the benefits and provide way to use the new aspects of digital world like digital marketing.

- Pakistan has rich-tech based human resource and many IT specialists including teenagers like Arfa Kareem have made Pakistan proud on several occasions in the field of IT. Recently, at Microsoft Office Specialist World Championship 2016, a group of Pakistani students got bronze medals. Due to the huge potential of IT sector in Pakistan, E-Corridor will be established to supplement the CPEC project. This will enhance the capacity to achieve country's objective to become more digitized.

5. Summary

Keeping in view the challenges and prospects of E-Commerce in Pakistan, there is a need of market research about the potential of starting operations by a reputable Chinese company like Alibaba, T-Mall and JD with its office in Pakistan. Pakistani Government will start secure E-Payment gateway soon. Alibaba.com has a small setup in Pakistan but don't have office in the country, which creates hurdles in the business. After market research, we can collaborate with Chinese E-Commerce Company or research institute so that we will have facts and figures and reason to launch Chinese company in Pakistan. The collaboration between China and Pakistan will improve E-Commerce business in Pakistan and strengthen projects under CPEC.

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Chapter - 8

Cross Border E-Commerce in Mongolia

Burmaa Sampil and Urandelger Gantulga

Abstract

Now-a-days more than half of the world's population has unlimited access to the internet and countries have started to migrate into a platform economy further as the world has come to accept online shopping. As a business with no country borders, E-Commerce has increased country to country export and became a channel to the world economy, trade, and national development becoming a gateway for new possibilities. Modern techniques and technology development has given rise to Distance Shrinking Technologies (DST) which allows for people to communicate more easily, receive information simultaneously and immediate information travel to every corner on earth accelerating politics, economy and cultural sectors. Online shopping has caught the interest of researchers around the globe, and has grown to become its own field of research. Evaluating the current status of E-Commerce, examining the behavior of the customers, their attitudes, factors, the legal environment, and the infrastructures of E-Buyers has become crucial issues to solve. This chapter has made an attempt to present the status of Mongolia's E-Commerce development and explore the potential for future for online shopping and how this trans-border market will benefit the country are discussed.

Keywords: E-Commerce, Online Shopping, Delivery Service, E-Payment, Customer Satisfaction.

1. Introduction

The swift development of home shopping has expanded the economy, society, cultural ties without the effect of distance, affecting business communications, B2B, B2C, C2B, C2C are further enlarging the industry, creating new job opportunities and impacting daily life patterns either directly or indirectly. World famous brand distributors have closed branch stores, becoming capable of selling and distributing goods and services to all parts of the world making online sales and generating their primary income. Out of 5

advertisements on the internet 2-3 have become product ads over the years. Using social media sites /Facebook/ we can get notified about the products we want on the spot, unwillingly becoming consumers, further illustrating how online shopping has become an integral part of our lives, the Table 1 will explain the positive points.

Table 1: Advantages of Online Shopping

Buyers	Sellers
• Time Saving, No Need to Travel and Burn fuel • Saving of Money • Easy to get what you find in the website • Convenience to Buy • Better Price Options • Easy to use Credit Cards • Easy Price Comparison • No Sales Pressure. • No Waiting	• Using your online shop to showcase your products to existing customers. • Reducing order processing costs - customer orders can automatically come straight into your orders database from the website. • Fixed prices for all types of potential customers • Well-defined products or services that can be sold without human involvement in the sales process • Competing with larger businesses by being able to open 24 hours a day, seven days a week. • Being able to receive payment more quickly from online transactions.

Table 1 revealed that it is possible for business entities to reduce costs, reduce time and space limit while making it easier for customers to access the desired goods, services, and information for low cost, effort. One can easily compare the price of the products intended to be purchased by the buyer. No sales pressure is evidenced in this context and No unnecessary waiting for billing and other needs. Whereas, in respect of Sellers, the website can be accessed all the 24/7 hours and able to secure the payment due for the product sold at the earliest. Effective development of E-Commerce is directly dependent on its development of infrastructure or technological solutions, payment, delivery services, and legal arrangements. Electronic commerce is a technology development-driven business, so technology solutions are defined by its components, such as software, communications, internet networking and service quality of websites. Without solving such factors E-Commerce would not be possible.

2. Theoretical Background

The Internet is a global network with common standards and is the result of information technology and hardware, the web site contains the most comprehensive suite of products such as product introduction, search engine, subscriptions, shopping carts, payment and delivery terms. The technology based on the E-Commerce infrastructure should benefit users to find products, but also it is required to be more accessible, simple and secure for

platform developers to use. Today, E-Commerce payments are being made by using many different digital technologies using cards, online, mobile, cash and lending. While in Mongolia, large E-Commerce sites and shipping companies have not been fully developed, small E-Commerce sites and Social media /Facebook/ have filled the empty space by becoming the main channel for advertising and marketing. In other words, Facebook is the main competitor of our websites, but the reliability of payment and delivery are almost unmet.

The information and communication technology development index (IDI) of nations are comprised of 11 subdivisions of three sub-indexes viz., availability, use and capacity. According to a survey released by the International Telecommunication Union from 2016, Mongolia ranked 97 among the 167 countries during the year 2010, ranking 84 in 2015, following a rapid growth.

Table 2: Telecommunication Technology Development Index

Indicators	World Average	Average for Asia Pacific Region	Mongolia	
			2010	2015
Development Order			97	84
ICT Development Index	5.03	4.70	3.52	5.00
The Subdivision of ICT Access	5.53	5.14	3.98	4.97
Telephone Users / 100 People	15.19	11.90	7.10	7.92
Mobile Users / 100 People	96.07	90.60	92.50	106.06
Internet Bandwidth	60.00	28.31	62.10	87.87
Percentage of Households with Computers	43.63	34.10	22.30	35.76
Percentage of Households with Internet	43.94	36.30	7.70	29.00
The Subdivision of ICT Applications	3.64	3.28	00.75	3.20
Number of Internet Users / 100 People	40.57	33.80	102	27.00
Number of Home Internet Users / 100 People	10.34	8.30	2.80	6.84
Mobile Internet Users / 100 People	37.20	29.70	7.40	57.62
The ICT Capacity Sub Index	6.81	6.70	8.12	8.69
Adult Literacy Rate	87.95	88.09	98.30	98.38
Ratio Of High-School Education	81.48	80.72	91.60	103.48
Ratio Of Bachelors Education	37.21	32.62	53.80	62.27

Source: White Paper-2016

Table 2 outlined the details of Telecommunication Technology Development Index which is comprising more than 10 variables. When one

could examine the ICT development Index of Mongolia, it is almost equal to the global average of 5.03 during the year 2015 whereas this was comparatively less in the case of Asia Pacific region revealed that Mongolia has witnessed a fast development in respect of ICT development index with in the period of five years. The Mobile phone users per one hundred people is arrived at 106 revealed that the people are having more than one phone for their communication purpose. This was found to be very less in respect of Global average and the average of Asia Pacific Region which are respectively sharing 96 and 90 per one hundred people. The use of Internet bandwidth also found to be around 88 in Mongolia and the same is found to be very less in Global average which stands at 60. All these developments are mainly due to the increased literacy rate favorable with Mongolia to the tune of 98 and the same was found to be 88 in the world average. The high literacy rate is visible because of the higher ratio of high school education and collegiate education in support of Mongolia as these two are very low in the global average revealed that the Mongolia is going to catch up considerable share of E-Commerce development globally in the short span of time. Besides these, few problems are also visible in the process of online shopping faced by the consumers of Mongolia which are furnished as follows.

- Lack of domestic manufacturers,
- Lack of Online shopping experience to the consumers
- Did not have amplified hand to hand delivery, logistics and insurance
- Human resources did not show interest in Internet shopping
- Information technology and software company relationships are not in facilitative mode to catch up E-Commerce
- Lack of Specific E-Commerce Policy with Mongolian State
- Problems in developing training programs capable of kindling the desire of the consumers

3. The Complications of E-Commerce Development

Twenty years have passed since Mongolia got connected to the Internet, two out of three people have gotten the Internet. Currently, cellular services cover 95 per cent of our territory, reaching 5.60 million registered subscribers, and the growth is relatively stable.

3.1. Delivery Service

The delivery service is very important to E-Commerce, and the

responsibility lies with the company, post-mail, delivery agencies etc.

The Post Office operators "Mongol Post" and "Tegbe" and 57 other organizations have received operating licenses in the Mongolian Postal Service market. The Mongol Post provides about 90 per cent of the domestic postal services. Domestic correspondence has increased by 3.10 times compared to the previous year. The postal service increased by 87 per cent from the previous year, and international postal services increased to 20 per cent. In recent years, many shipping companies have formed and developed, further expanding the domestic online market and trade. Rural and local communities are now connected to high-speed internet, but there is no customer choice between the goods and that makes a huge potential market for them to buy and sell cheap and high-quality goods. They are required to deliver services at a reasonable cost, quickly and reliably. In a country, with poorly developed urbanization and localization, post and delivery costs are relatively high, negatively affecting the delivery of goods. In order to improve the quality of delivery services, we need to focus on addressing and utilizing postal services with international standards and reducing the cost of delivery service.

3.2. Legislative Regulation

Today, Most Countries in the World Follow International Standards and Comply with Several Legal Documents Governing E-Commerce. These Include

- Vienna Convention on the International Treaty of Sale and Purchase
- Brussels Convention on Civil and Commercial Court Decision Enactment
- The Hague Convention on the Issues of Foreign Court Decisions, Disputes Settlement, Jurisdiction over Civil and Commercial Matters
- Convention on the Use of Electronic Relationships in International Treaties

Countries are different in terms of population and land characteristics, concentration of settlements, traditional business approaches, state participation, and legislation.

In Mongolia, there are many law enforcement agencies dealing with business regulation, protection of consumer rights, marketing, advertising, fair competition, data protection, intellectual property and taxation, but to regulate E-Commerce and civil and commercial disputes. It is required to further develop and follow the "E-Commerce Law". Problems such as

competition in the market, trade turnaround that accelerate the Product Life Cycle, and increased customer engagement and influence, are becoming increasingly important to communicate in the industry that is the most attractive business world. The challenges in this sector are related to the sale of fraudulent goods, protection of consumer rights, payment and customer information security.

Information, Postal, and Communication Technology (IPCT) has developed several national laws on electronic signature, information security, data protection, e-government, and national programs, and has adopted several standards. The goal of the "Sustainable Development Concept of Mongolia-2030" and the "Government Policy on Information and Communication-2025" (2016) is to strive to develop the E-Commerce infrastructure in groups and sections. For example, connecting the population to a high-speed Internet network is expected to reach 70 per cent in 2020, 90 per cent in 2025, and 95 per cent in 2030, with the same rates and tariffs that are independent of the location of the region, transmitted through high-speed transmission network connecting Asia and Europe. Ten times the flow of information, 70 per cent of rural and urban population to provide broadband Internet services, 50-85 per cent of government-targeted services to electronic form and launch a national satellite. The number of Internet users worldwide in 2015 is expected to reach 4.20 billion by 2020, accounting for 55 per cent of the population. The growth rate of Internet consumption (8.90 per cent in 2015) is projected to reach 4.30 per cent in 2020. Comparatively slowdown in online trade in Mongolia depends on many factors, such as legal regulation, people's knowledge, confidence in online commerce, and consumer risks. The fast track transaction is possible if the online operating firms are accepting different type of payment options. In this regard, a small effort has been taken to document the payment options available with the different websites and are presented in Table 3.

Table 3: Different Websites and Payment Mechanism in Mongolia (2016)
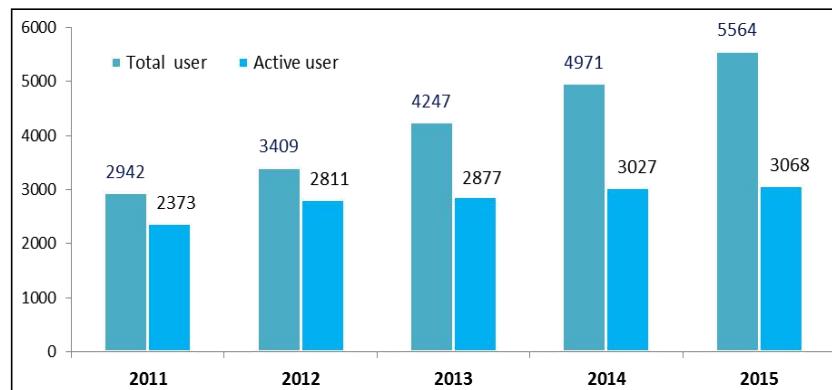
S. No.	Websites	Consumer	Payment Condition	Delivery Service	Advantages
1	www.apm.mn	Registered Users	In cash By Debit Card	24 hours 2500₮+	Rapid delivery 5000₮
2	www.rio.mn	Registered, Unregistered Users	In cash By Online Payment	24 hours 3000₮+	Minor range of products
3	www.mmapket.mn	Registered, Unregistered Users	In cash By Debit Card	24 hours 3000₮+	What3Words location
4	www.itzonestore.mn	Registered, Unregistered Users	In cash By Debit Card	5000₮+ 20000₮	Online discount

				above free	
5	www.bshop.mn	Registered, Unregistered Users	Cash and Card Payment	7-14 days 3000₮	Possible to by from abroad
6	www.easyticket.mn	Registered, Unregistered Users	Картаар Candy	Free	Time savings
7	www.shoppy.mn	Registered, Unregistered Users	Cash and Card Payment		

Table 3 has highlighted that there were 7 different websites are available for making online purchase in which both the registered and unregistered users were operating the platform and are capable of accepting both cash and debit card payment for the transaction of goods through E-Commerce. Most of the agencies were able to deliver the commodities ordered by the consumers within 24 hours. Whereas, the "bshop.mn" is alone able to provide the delivery in a week or two. It might be due to poor infrastructure support for making delivery services on time.

4. Research and Development

Today, there are more than one hundred websites on the Internet that are not available through official website of the organization, of which 57 are active websites. E-Commerce can be divided into three groups: These include E-Trade, E-Service and E-Payment websites. In Mongolia, the number of Mobile phone users are falling under two categories. They are Active users and inactive users. Here, the active users to the total user's details were presented in the pictorial form in Figure 1.
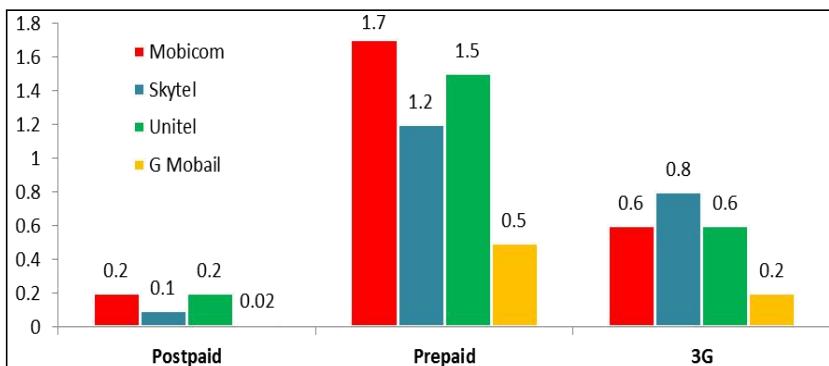


Source: White Book-2016

Fig 1: Number of Mobile Cell Phone Users (Thousands of Units)

Figure 1 outlined that the number of Mobile phone users in Mongolia is arrived at 29.42 lakhs in toto. In that the active users of the cell phone are

arrived at only 81 per cent to the total. Though the total number of cell phone users are increasing annually, the active users for the purpose of E-Commerce related transactions were accounted to be marginally increasing. When one could compare the active users of Mobile phone during the year 2015 over the year 2011, it is found to be 30 per cent increase only. Whereas, the total number of mobile phone users in the same period is found to be 89 per cent increase. When one could compare the total users and the active users, the active users were trailing behind. It might be due to the poor awareness, less risk taking attitude of the consumers in Mongolia and the financial slowness associated with Mongolian state. Besides, the inactive users may be motivated to become the active users through the appropriate promotional efforts that should be taken by the Mobile phone operators by announcing consumer friendly schemes to attract the inactive consumers. In this context, who are all the operators provide services to the Mongolian consumers are of much important to the researcher and hence these are analyzed and the results are presented in pictorial form for better understanding of the readers in figure 2.
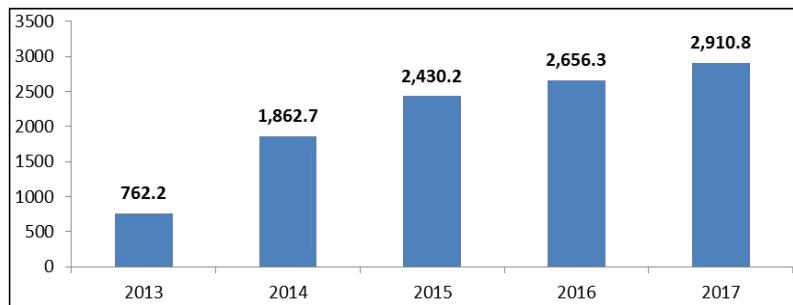
Source: Statistics on ICTD, 2016

Fig 2: Cellular Phone Users by Operator in Million Units

In Figure 2, Mobi.com; Skytel; Unitel and the G.Mobail are the operators were operating in the Mongolian State. From the figure-2, the prepaid mobile users are comparatively larger than the postpaid mobile users. To be precisely, 90 per cent of total users are prepaid and 10 per cent are postpaid users. Since the launch of high-speed 3G technology services, the number of users has grown rapidly from year to year, reaching 70 per cent of active users, which has increased to 7.80 times compared to 2011. As of 2018, 75 Internet Service Providers operating in Mongolia operate around 2.9 million, of which 90.5 per cent are mobile Internet users. Considering
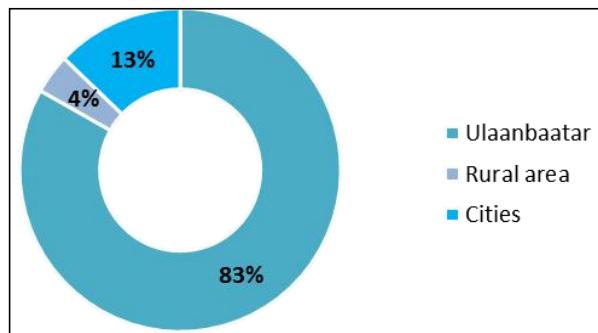
91.40 per cent of total Internet users connect to the Internet, using GPRS, EDGE, 3G and EVDO technology. The details of internet users over the years are presented in Figure 3.

Source: Mongolian Statistics, 2018

Fig 3: Details of Internet Users in Mongolia in Thousands

The Magnitude of Figure 3 has communicated that a sudden change in the Internet users is visible from 2014 onwards. It was mainly due to the number of Internet service providers were increased and at the same time the service providers has enhanced their service infrastructure to cater the needs of the Mongolian consumers. The percentage of internet users during 2013 to 2017 is found to be increased to the tune of 282 per cent during the year 2017 over the year 2013.

Fig 4: Location and Percentage of Internet Users

Figure 4 outlined that around 84 per cent of Internet users were located in Ulaanbaatar city, 13 per cent in Aimag centers, and 4 per cent in inner Sums. Average internet speed in Ulaanbaatar, Darkhan and Erdenet cities are above 2 MB / sec and in other areas 300 Kb / sec - 2 Mb /second. With the internet service available with the consumers of Mongolia, how many users have Internet access is of much importance to the researcher and hence these details are presented in Table 4.

Table 4: Number of Users who have Internet Access and Connections in Thousands

Years	Xdsl	Optical Cable	3G		Wi-Fi	Wi-MAX	Others
2012	36.70	65.20	520.00	5.30	24.60	2.20	
2013	40.70	107.90	655.10		10.40	24.30	2.70
2014	29.20	168.00	1734.40	11.70	16.30	2.40	
2015	24.10	157.20	2222.10		16.40	10.30	0.002

Table 4 outlined that there were five modes of internet service provisions to the consumers. Among the different modes of service provisions, 3G found to dominate all the modes followed by Optic Fibre Cable (OFC). The Wi-Fi connectivity is found to be dismal in Mongolia. However, its usage is found to be increasing marginally. Whereas, the Wi-Max is found to be decreasing over the years because of increased usage of 3G and the Wi-Fi connectivity for facilitating communication and E-Commerce usage.

5. Summary

This chapter is trying to conclude that about 90 per cent of the users are connected to the cellular network, while the remaining 10 per cent are connected to the Internet via the fixed cable connection. In terms of usage, 10 per cent of the total internet connection is connected to mobile internet connectivity, and 90 per cent are connected to a fixed Internet. From that one could infer that Mobile Internet access is accessible, but it is inappropriate to exchange large amounts of information due to technological limitations and high costs. Access to a fixed Internet connection is low, but high consumption and cost of technology can be seen in two extreme differences between the use of large amounts of information exchange. Fixed Internet application is strongly dependent on construction and population densities, so it is important to find a solution to the "high-capacity, low-cost" Internet service that is located in a residential area of low-density and low-density urban areas. The solution is based on a good public-private partnership model, regardless of technology.

The slowdown in Internet and commerce has been attributed to the fact that market participants, national producers, wholesale and retail organizations, individuals, and especially customers, have little to no information. Pre-ordered Online shopping in Mongolia has more demand. The survey results show that the number of customers in online sites of Mongolia, is more active during the night hours between 9 am and 12 am. The regulation of the Internet and the legal environment in Mongolia has not been fully refined according to the consumers of Mongolian E-Commerce.

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Chapter - 9

Potentials of Cross Border E-Commerce in Kenya

Dr. Jerotich Sirma

Abstract

1. Introduction

Recent developments in the retail sector and the digital space shows digital commerce has gained momentum and the potential for its success is huge. Communications Authority of Kenya and Kenya National Bureau of Statistics found that about 27 per cent of Kenyan firms, sold their products online. The report also indicated that 32 per cent of enterprises, were the main deterrent to online selling and buying of their products via the Internet thus rendering their products unsuitable.

Kenya has a huge potential and steady momentum for growth in E-Commerce and this is supported by the number of young people who are starting online businesses. Most youths find it much easier to do business online unlike the brick and mortar enterprises where huge financial outlay is required to set up the infrastructure.

Kenya's huge potential for E-Commerce has attracted the founder of Alibaba Group Holdings Limited, Jack Ma. Alibaba provides the fundamental technology infrastructure and marketing reach to help merchants, brands and other businesses to leverage the power of the Internet to engage with clients. The Mobile payment platforms success such as M-Pesa, M-Shwari and M-kopa has promoted the growth of E-Commerce in Kenya

Safari.com and Sendy is committed in developing Mobile Information Communication Technology (ICT) startups, which creates a fertile ground for the growth of E-Commerce. Safari.com and Sendy offers a marketplace for last-mile package delivery and logistics services, allowing customers to send packages and documents using a mobile application that connects them to motorcycle riders, and drivers of vans and pickup trucks. Safari.com Spark Fund of $1 million was provided to support mobile ICT startups and enable the development of innovative mobile solutions

As Brick and Mortar stores struggle to survive, online shopping malls are

expanding with more players entering the digital space to cash in on the readily available Internet shoppers. The entry of the largest and most profitable telecommunications firm, Safari.com, into E-Commerce market with its platform Masoko should give physical retail chains more reason to worry about their future. Already established E-Commerce players in Kenya include Africa Internet Group's Jumia, Kilimall International and OLX, a unit of Johannesburg-listed Naspers Ltd.

With the Internet connectivity in Kenya hitting 60 per cent while the penetration of formal retail is estimated at 30 per cent, the number of Kenyans buying goods online is expected to grow. Currently, the fraction of online shoppers is estimated at 0.5 per cent. Subsequently, Kenya's growth momentum in E-Commerce is unstoppable. By 2017, E-Commerce contributed 6 per cent of all purchases in Kenya. Online shopping went up by14 per cent in the last three years according to Business Today. Global consumer research forum indicated that one out of every four Kenyan's shop online

2. The Value of Cross Border E-Commerce

Key Values of Cross-Border E-Commerce in Kenya Include the Following

- International Business Expansion
- Increased Revenue Generation
- Awareness on National and International Brands
- Maximizing of Selling of Low Demanded Products
- Increased Access to End Consumers
- Establishment of Good Customer Relationship
- Increased Business Sustainability

2.1. International Business Expansion

Cross-border E-Commerce benefits the sellers, both retailers and brands as they get the opportunity to expand their business into demographics with a burgeoning economy. The domestic E-Commerce retailers can expand their business and market penetration. They get an opportunity for selling products internationally throughout the globe. The seller can sell the complete range of products without any geographical barriers.

2.2. Increased Revenue Generation

With cross-border E-Commerce, the seller gets the chance to penetrate into the international market. Once they trade in the international market, the

brand gets more recognition which eventually results in higher demand. So the sellers get an opportunity to increase their revenue in the international market at a competitive price by floating the quality products for the international markets.

2.3. Awareness on National and International Brands

Cross-border E-Commerce benefits the sellers by improving their brand awareness in the international market. If you offer unique products to your audience that abide by their needs and requirements, you are increasing your brand awareness and recognition which in turn helps to create a global brand. Cross-border E-Commerce also opens up the possibility to customize your product that suits the different market needs. The unknown brands can also be exposed into the international markets by highlighting the quality features of it and its price negotiation so that the international consumers can have the acceptability to check the produce and order for the same.

2.4. Maximizes Selling of Low Demand Domestic E-Commerce Products

At times, a product that is not famous in domestic E-Commerce market may have a high demand in other markets. Cross-border E-Commerce is a platform for best products to sell internationally. Thus, the seller is enabled to sell a product in the international market that has low value or recognition in the domestic market.

2.5. Increased Access to End Customers

By reducing the end selling price, you will be able to attract more customers in the international market who have traditionally been controlled by distributors earlier. In this way, you will be able to drive higher sales and have a greater share of the profit margin.

2.6. Builds a Good Customer Relationship

If your customer trusts the product you sell, he/she will automatically develop faith in your brand which will help in building a good customer relationship. Genuine and good quality product offered at competitive price will facilitate the customers shopping with your brand frequently.

2.7. Increased Business Sustainability

Cross-border E-Commerce is a growing and emerging platform today, with increasing recognition worldwide. Therefore the sellers don't have to worry as their brand will sustain in the international market with more awareness and popularity among the customers.

If Kenyans want a platform to increase their business sales and overall

profit overseas then cross-border E-Commerce is the Gate way to reach out the international market. Cross-border E-Commerce will help Kenyans achieve success in the other demographic markets with ease and high levels of overall profits.

Cross-border E-Commerce renders benefits of saving time and money while transacting business on a global scale. It also gives shoppers a variety to choose from hence they can get better quality products.

3. The Challenges of E-Commerce

However, E-Commerce players will still have to deal with issues of trust to be able to beat competition, as many Kenyans still do not believe in buying goods online.

Some of the challenges experienced include the following.

3.1. External Challenges

3.1.1. Currencies

There are roughly 180 currencies worldwide and 13 per cent of online shoppers will abandon their shopping cart if the price is displayed in a foreign currency.

3.1.2. Logistics

Differences in road infrastructure, warehousing, and delivery methods can also pose a serious problem for retailers.

3.1.3. Legal Regulations

Retailers need to be aware and comply with the legal obligations of the country from which their consumers are ordering. In some areas, consumer protection laws may lead business to change their return and exchange policies.

3.1.4. Consumer Habits

Motivations and preferences differ by country and even by region, making it crucial for retailers to understand the purchasing behavior of their target market.

3.2 Internal Challenges

3.2.1. Constantly Changing Content/Product Listings

Companies need to ensure that all new collections, pricing promotions, and other changes are up to date across all markets.

3.2.2. Specialized Industry Content

Many sectors like fashion, electronics, jewelry, etc., require knowledge of industry terms and concepts in order to accurately translate product descriptions and manuals.

3.2.3. Adapting to every market

Localizing your product information and content for every market means managing different languages, currencies, payments, measurements and much more.

3.2.4. Strategic Search Engine Optimization (SEO) Issues

Entering a new market means starting your SEO from scratch.

3.2.5. Budget Constraints

Adapting your business to each target market requires time, employees, and money.

3.2.6. Security and Mistrust Issues

Most Kenyan consumers are scared to purchase merchandise only due to trust and security breaches.

3.2.7. High Illiteracy Rate in using the Internet

Training needs to be undertaken in Kenya so that consumers can comfortably use the Internet for E-Commerce and/or Cross-border E-Commerce transactions.

4. Institutions / Universities Offering E-Commerce Education in Kenya

If the challenges are to be met with by the authorities of Kenya, the Kenyan legal issues are to be chartered out and E-Commerce Policy need to be developed on the lines of Chinese and Indian Counterparts. Before that the awareness level on E-Commerce and its significant contribution to the economy of Kenya need to be learnt. For that the Key Education Programs (KEEP) are the need of the hour. Even if anyone is interested in promoting the awareness level through appropriate education programs, political will should be there to promote the Kenyan Economy through E-Commerce by floating or permitting certain key operators of E-Commerce by providing need based services to the E-Commerce Service provider.

It is interesting to note that the Kenya is capable of establishing and maintaining higher educational standards in E-Commerce through appropriate education, the number of takers is found to be poor because of poor awareness and its impact of the program. However, I would like to present the details of

institutions promoting the E-Commerce Education for the benefit of the readers abroad and the students in Kenya. These details are presented in the following Table.

Table 1: Details of Educational Institutions Offering E-Commerce Education in Kenya

S. No.	Name of the Institution / University	Location
01	Rosetta Business College	Nairobi
02	Muranga Institute of Science and Management Studies	Kiriaini
03	Rural Aid Training Institute, Nairobi	Nairobi
04	Rural Aid Training Institute, Athi River	Nairobi
05	Foresight Institute of Logistics and Business Studies	Nairobi
06	Frontier Institute of Professional and Management Studies	Garissa
07	Institute of Business and Professional Studies,	Nairobi
08	Insight Commercial College	Limuru
09	Swiss Management Academy, Nairobi	Nairobi
10	University of Nairobi School of Economics	Nairobi
11	Catholic University of Eastern Africa Faculty of E-Commerce	Nairobi

Table 1 outlined the details of institutions offering E-Commerce Education in Kenya. But it is learnt that most of the institutions were offering a diploma level of either a business program or an E-Commerce program which are only partly related to E-Commerce Education. Whereas, the Catholic University of Eastern Africa Faculty of E-Commerce is capable of offering an E-Commerce education at Masters Degree level. This university is offering an MBA program in E-Commerce one of the leading university in Kenya. However, the career related issues are not very well documented after the completion of MBA in E-Commerce education.

All other institutions delineated above are not directly teaching the E-Commerce in a fullest spirit and they are offering the related programs like Diploma in Entrepreneurship, Marketing, Sales Management, Accounting, Logistics and Supply Chain Management, Business information studies etc. and hence a very dedicated program incorporating need based skills by developing a syllabi exclusively for the E-Commerce education by inviting the opinion of the E-Commerce firms, technocrats of E-Commerce and the experienced professors at popular universities are the need of the hour to take the program a grand success to promote E-Commerce in a big way.

4.1. Research Needs of E-Commerce

- Researchers can conduct a study on consumer behavior of their target

market so that retailers can understand the purchasing behavior of their customers. The research can focus on examining the different motivation and preferences of their target market by country or region.

- Researchers can also analyze the challenges of localizing product information and content for every market by managing different languages, currencies and/or payments

- Researchers can pursue research on the impact of specialized industry content in relation to achieving accurate translation of product description and manuals.

- Researchers can examine the impediments of legal regulations of the country/Countries from which their consumers are ordering their merchandise from.

- Researchers can analyze the challenges in infrastructure, warehousing, and delivery methods that can pose serious problem for retailers by country or region.

- Analyze how budgetary constraints has embedded the growth of cross-border E-Commerce in Kenya.

5. Summary

Kenya has a huge potential and steady momentum for growth in E-Commerce and this is supported by the number of young people who are starting online businesses. With the Internet connectivity in Kenya hitting 60 per cent while the penetration of formal retail is estimated at 30 per cent, the number of Kenyans buying goods online is expected to grow further in future. Also more players are entering the E-Commerce scene is due to the high turnover it offers with estimates pointing to a turnover as high as 25 times over the physical retail stores. It also has lower overheads because it doesn't require expensive infrastructure to start with. Slow progress is mainly due to lack of awareness among the consumers and hence awareness creating exercise at university level to the common consumers of youth are very much needed.

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Chapter - 10

Potentials of E-Commerce in Egypt – A Case Study

Mahmoud Moustafa Elhabbaq

Abstract

Electronic commerce is so fast in spreading its legs in developing nations. As more goods and services are shopping online, it becomes more and more significant for enterprises to have an online existence. The purpose of this chapter is to gain an in-depth understanding of exactly what role E-Commerce can play in the Egyptian economy. Furthermore, based on reality and challenges make recommendations which improve the E-Commerce a successful one in Egypt. In order to gain the in-depth knowledge required for the chapter, a case study methodology utilized from pay fort report which carried out using detailed surveys that pooled hundreds of regional merchants and thousands of consumers across the Arab World, and depends on secondary data collected from national data source UNCTAD and some websites related to E-Commerce.

Egyptian E-Commerce market has grown steadily since the late 1990s, when the first Egyptian-owned E-Commerce companies were founded. However, the market is still in its early stages. E-Commerce business-to-consumer (B2C) activities in Egypt reached US $ 2.43 billion in 2016. This forms approximately 39 per cent of total online shopping, which amounted to about US $ 6.15 billion, according to pay fort report in 2016. The result of SWOT analysis and descriptive analysis indicated that the significant impact of E-Commerce on economic growth, GDP per capita and the unemployment rate.

Egypt's E-Commerce faces several challenges as lack of high-speed broadband services and overloaded networks, logistics sector and standard service still less viable in rural and remote areas and in governorate city centers outside of Cairo, slow and burdensome clearance procedures at customs, a cultural preference for cash, a specific policy of taxation on E-Commerce does not exist in Egypt till now, Egypt has a few of E-marketplaces and E-Commerce and related platforms while the domestic market is large enough for more diversity, lack of E-Commerce-specific

curriculum in higher education, consumers and businesses have no awareness of the utility or value of E-Commerce.

Key Words: Case Study on E-Commerce; E-Commerce Challenges; E-Commerce in Egypt

1. Introduction

Information technology is playing a key role in the economy and E-Commerce is more and more an urgent platform for economic growth and competitiveness in developing nations. E-Commerce has a robust prospective to extend in Egypt and to support economic growth. After concentrated investment in Information Technology structures and facilities since the mid-eighties, Egypt in the past two decenniums has developed a strong ICT sector through the liberalization of the telecommunication sector, forming an atmosphere favorable to increase its information technology (IT) services. As one of the most energetic and fastest-rising sectors, representing almost 3 per cent of gross domestic product (GDP) in 2015-16, the ICT sector is in a decent position to support E-Commerce activities.

Source: UNCATD

Fig 1: E-Commerce Ecosystem in Egypt

2.   The Research Problem Statement

Although E-Commerce plays a major role in the economic activities of many countries, few researches investigated the situation of E-Commerce in Egypt. The study answers the following questions:

- What is the present situation of E-Commerce in Egypt?
- What are the impact of E-Commerce on the Egyptian economy?
- Are there any challenges faces E-Commerce in Egypt?
- What are the opportunities of E-Commerce which Egypt can gain?
- What are the significant factors which could influence E-Commerce?

2.1. Objectives

The objectives of the study is to measure the role of E-Commerce which can play in the Egyptian economy. Furthermore, based on reality and challenges, make recommendations to improve the E-Commerce, a successful venture in Egypt.

3.   Methodology

The study used SWOT analysis and descriptive approach as research methodology and a case study utilized from pay fort report which carried out using detailed surveys that polled hundreds of regional merchants and thousands of consumers across the Arab World in 2016, and depends on secondary data which were collected from national data source UNCTAD, Ministry of Communications and Information Technology and some websites related to E-Commerce. Descriptive statistics like percentage analysis were used wherever needed to draw inferences.

4.   Results and Discussion

4.1. The State of E-Commerce and its Determinants in Egypt

In 2016 the E-Commerce industry for Egypt reached $2.43b comparing with $1.4b in 2014. This change represents an average annual growth rate of 73.5per cent over the years selected

4.1.1. Population

In 2013 the population of Egypt was only 85.7 million but as of 2016, the population has now reached 90.5 million. This change represents an average annual growth rate of 5.6per cent over the years selected.

The growing population is expected to have a positive impact on the E-Commerce category across the first.

4.1.2. Internet Users

In 2013 the number of internet users in Egypt was only 22.04 million but as of 2016 this user base has grown up to the level of 33.70 million. This change represents an average annual growth rate of 52.90 per cent for internet users. The growing number of internet users is helping to expand the online shopping in Egypt and is expected to have a positive impact on E-Commerce in general across the country (Table - 1).

Table 1: Major Factors Contributing to E-Commerce Development

Particulars	2013	2014	2015	2016
Population (M)	85.70	87.60	89.60	90.50
Internet Users (M)[a]	22.04	25.91	29.84	33.70
Online Buyers (M)	NA	NA	15.2	17.7
Mobile Phone Penetration (per cent)[a]	29.40	33.90	37.80	41.20
USB Modem Subscriptions (M)[b]	3.90	4.05	3.82	3.28
Mobile Internet Subscriptions (M)[b]	14.50	21.77	26.30	28.65

Source: [a] According to annual survey conducted by CAPMAS and MCIT for measuring ICT access and use by households and individuals

[b] Ministry of Communications and Information Technology, National Telecom Regulatory Authority, Telecom Egypt

Table 1 outlined that the population is growing at a faster rate. Within a period of four years, 5 million increase in the population is visible indicating that the population during 2016 faced a 5.60 per cent growth when compared to the base period of 2013, The increase in population has enhanced their Mobile internet subscriptions which is arrived at 98 per cent increase during the year 2016 when we compare the base period of 2013.

4.1.3. Online Buyers

The increased internet subscriptions will indirectly motivating the E-Commerce transactions particularly the online transactions which is arrived at 17.70 million during the year 2016. It is only a marginal increase when one could compare the same during the year 2015. This change represents an average annual growth rate of 16.40 per cent for online buyers in Egypt.

4.1.4. Mobile Phone Penetration

In 2016 the number of smartphone users continued to grow reaching 41.20 per cent of the total population. The growing number of smartphone users is helping to expand online shopping in Egypt and is expected to have a positive impact on E-Commerce in general across the country.

4.1.5. Mobile Internet and USB Modem Subscriptions

In 2013 the number of mobile internet subscriptions was only 14.5 million users but as of 2016, this number of subscriptions has grown to 28.65 million. This change represents an average annual growth rate of 97.60 per cent for mobile internet subscriptions while USB Modem Subscriptions declined to 3.28 million in 2016, the change rate of USB modem subscribers in 2016 compared to 2013 represents a decline of 16 per cent.

4.1.6. Online Age Group

In 2013 the online age group was largely concentrated within the 18 to 24 age group accounting for 40 per cent of online users. In 2016 the most active online users were 18 to 24 accounting for 25 per cent of online users. Over the years, selected the least active age group was 35 to 39 in 2013, and more than 40 in 2016 making up just 7 per cent and 11 per cent of the online population respectively. (Table - 2)

Table 2: Details of Age Group in Making Online Purchases

Online Age Group (per cent)	2013	2014	2015	2016
18 to 24	40	15	19	25
25 to 29	30	50	21	25
30 to 34	15	13	22	24
35 to 39	7	13	14	15
40+	8	9	24	11

Source: calculated from pay fort reports, different issues.

In an online transaction, the role of active age group of 18-24 was visibly high during the year 2013 whereas the same was reduced during the year 2016. During the same period, the age group of 30 to 40 plus were found to have an increased access to the online transactions. It might be due to the late acquaintance of computers to the age group.

4.1.7. Income Level of Buyers

The young age groups are showing much interest in making online transactions or procurement of essential items from different platforms. Income level of the consumers is one of the factor which influence on making purchase decisions through online transactions. The details of income level are classified and the number of respondents under each age group is presented in Table 3.

Table 3: Income Level for Online Users

Income Level (per cent)	2013	2014	2015	2016
Less than $ 266	30	21	22	30
$ 267 to $ 532	23	37	26	26
$ 533 to $ 1,065	15	14	20	18
$ 1,066 to $ 2,665	9	6	10	4
$ 2,666+	1	5	5	1
Don't know	22	17	17	21

Source: calculated from pay fort reports, different issues.

Table 3 has highlighted five different level of income among the consumers. In that the consumers who are earning less than $ 266 were predominant during the year 2013 and 2016. As income increases, the number of consumers actually performed online transactions were found to be decreasing. It is totally a different picture. In general, as income increases, the number of consumers willing to transact online may found to increase. But it is decreasing. It is an interesting phenomena. If this is true, then the poor consumers who has rich experience in online transactions are capable of getting the required materials at lesser cost. Because the same material might attract higher price per unit at the shop floor or malls and hence the poor income level households were opting for online transactions.

4.1.8. Gender

In 2013 the most active gender participating online procurement was male accounting for 70 per cent of online users, but as of 2016, this has increased to 78 per cent. Whereas, the female participants participatory level is found to be eroded over the years. It might be due to their disinterest in making online purchases. Normally the female partners have the habit of visiting the shop floor and seeking variety of choices and then they listen to one or two and does the purchase. Here, they cannot see the varieties in a particular product. But the male partners have the habit of convincing the material floated in the online stores and make easy purchase. These details are analyzed and the results are presented in Table 4.

Table 4: Percentage of Gender Making Online Procurement of Goods and Services

Gender (per cent)	2013	2014	2015	2016
Male	70	77	77	78
Female	30	23	23	22

Source: calculated from pay fort reports, different issues.

The female participation in making online purchase is found to be on the decreasing state of affairs between the years 2013 to 2016 revealing a negative growth of 8 per cent in overall online activity of transactions (Table 4)

4.1.9. Top Buying Categories

In 2016 the top shopping categories were Mobile Phones, paying utilities bills, and Laptops accounting for 61 per cent, 38 per cent, and 37 per cent of online users respectively, while the least popular were Bags, Home, and Others.

4.1.10.   Preferred Payment Method

The most popular payment methods in Egypt were Cash on Delivery, Credit card, and Prepaid Cash cards accounted for 70 per cent, 16 per cent, and 7 per cent, respectively. While the least popular was the Debit card about one per cent of online users.

5.   Economic Indicators

5.1. Gross Domestic Product (GDP)

In 2013 the GDP for Egypt was $ 257 billion but it has hit to the higher level of $ 331 billion in 2016. This represents a change of 28.8 per cent in Egypt's GDP over this time frame.

5.2. GDP Per Capita

In 2013 the GDP per capita for Egypt was $ 3k but it has hit the per capita GDP to the level of $ 3.60k in 2016. This represents a change of 20 per cent in Egypt's GDP per capita over this time frame.

5.3. Unemployment

In 2013 the unemployment rate in Egypt was 13.50 per cent but it has hit to the lower level of 12.8 per cent in 2016. This represents a decrease in Egypt's unemployment rate over this time frame. (Table - 5)

Table 5: The Economic Indicators

Economy	2013	2014	2015	2016
GDP ($B)	257	262	285	331
GDP/Capita ($ k)	3.00	6.60	10.90	3.60
Unemployment (Per Cent)	13.50	13.40	13.00	12.80

Source: Pay Fort State of Payments, Pay fort, 2017

5.4. User Behavior

Number of Bank Accounts per Individual

In Egypt, the majority of customers have one bank account accounting for 58 per cent and customers with 2 bank accounts accounting for 28 per cent while customers have more than 4 bank accounts accounting for 3 per cent of the sample.

5.5. Education Level

In Egypt, 64 per cent have completed university-level degrees (e.g. BA, B.Sc) and 17 per cent have University higher degrees (Masters, MBA, Ph.D.) while 8.70 per cent have completed secondary school. The least percentage was 0.5 per cent had Elementary level of Education revealed that the Kenyan population is highly educated and hence the opportunities for E-Commerce transactions were high.

5.6. Remittance Preferences

In Egypt, 52 per cent choose to receive their salary as a bank transfer while 27 per cent received it in cash payment. While the preferences of new solutions as Do Pay accounting for one per cent.

5.7. Number of Credit/ Debit Cards per Individual

The majority of the banks in Egypt are developing initiatives to cope with the revolution in E-Services, by upgrading their online tools to reduce branch visits and reduce their operational costs and enable customers to save time. In Egypt, the majority of customers have 1 credit or debit card accounting for 48 per cent and 27 per cent have 2 credit or 3 debit cards. While 4 per cent have more than 4 credit or debit cards. (Table 6)

Table 6: Number of Credit/ Debit Cards per Individual

Number of Credit/ Debit Cards per Individual	Percentage
None	10
1	48
2	27
3	11
3+	4

Source: calculated from pay fort survey, 2016.

5.8. Online Banking Habits

In Egypt, 22 per cent of customers use both online and mobile banking while 56 per cent don't use any form of online banking. In Egypt, 63 per cent

of customers would recommend their bank to friends. While 17 per cent feel bank service is lagging behind. In Egypt, 39 per cent of customers were not a satisfied customer and would be open to other banking services and looking for alternatives while 44 per cent said that they were happy with their current bank and they are satisfied customers.

5.9. Online Shopping Behavior

Frequency of online transactions is one of the important task and hence an effort has been taken to assess the frequency of purchase of goods and services through online in Egypt. In Egypt, 36 per cent of customers said that they do not use the internet to make purchases, while 64 per cent do some shopping online. (Table 7)

Table 7: Online Shopping Behavior

Online Shopping Behavior	Percentage
No	36
Less than 6 times a year	43
More than 6 times but less than 12 times a year	12
1-4 times a month	7
More often	2

Source: calculated from pay fort survey, 2016.

From Table 7 it is also interesting to note that 43 per cent of the customers had the habit of purchasing the goods and services around 6 times per annum followed by 12 per cent of the customers had the habit of purchasing greater than 6 times per annum.

5.10. Online Payment Behavior

While assessing the payment mechanism in vogue with the consumers, 47 per cent of the customers use online payment services while 53 per cent choose not to use these services. (Table - 8)

Table 9: Online Payment Behavior (Per Cent)

Online Payment Behavior	Percentage
No	53
Yes, less than 6 times a year	26
Yes, more than 6 times but less than 12 times a year	11
Yes, 1-4 times a month	7
Yes, more often	3

Source: calculated from pay fort survey, 2016.

5.11. Cash on Delivery Preferences

In Egypt, 67 per cent of customers will make online purchases without a cash on delivery service if they know it is secure, and 34 per cent of the customers still prefer to pay in cash compared with using the mobile wallet. In Egypt, 49 per cent of the customers do not have any form of mobile wallet while 27 per cent use them for offline payment.

6. SWOT Analysis of E-Commerce Market in Egypt

In SWOT analysis (the acronym is 'S' for Strengths, 'W' for Weaknesses, 'O' for Opportunities, and 'T' for Threats), the study tries to find out the strengths and weaknesses of the E-Commerce market in Egypt, then after the study try to identify the opportunities presented by the environment and the threats posed by that environment. These are presented in Table 9.

Table 9: SWOT Analysis of the E-Commerce Market in Egypt

Strengths	Weaknesses
- Huge market - A big number of potential customers - Strong telecommunication infrastructure - Growing internet culture - Government initiatives to promote IT - The highest number of E-Shoppers in the region - The most diversified economy in the Arab world	- Lost Trust. - Poor knowledge about E-Commerce. - Weak banking system to support E-Commerce activities (payments, credit cards) - Low Penetration rate of mobile phone users - Low ICT (lack of high-speed broadband services and overloaded networks) - Low R & D capability
Opportunities	**Threats**
- Expand the activity worldwide - Decent higher education institutes - Geographical nearness - ICT Skills - Legislative Atmosphere - Employment Potentials - Fast growing sector - Increased investment opportunities	- Percentage of Population under Below Poverty Line - Low per capita GDP - High Unemployment rate - Lack of coordination of Policies - Low Quality of Education - Poor Generation of Data - The Cultural Preferences for earning cash

7. Summary

The study concludes that measured indicators are expected to have a positive impact on E-Commerce in general across the country and the significant impact of E-Commerce on economic growth, GDP per capita and

the unemployment rate. Egypt's E-Commerce faces several challenges as lack of high-speed broadband services and overloaded networks, logistics sector and standard service still less viable in rural and remote areas and in governorate city centers outside of Cairo, slow and burdensome clearance procedures at customs, a cultural preference for cash, a specific policy of taxation on E-Commerce does not exist in Egypt till now, Egypt has a few of E-marketplaces and E-Commerce and related platforms while the domestic market is large enough for more diversity, lack of E-Commerce-specific curriculum in higher education, consumers and businesses have no awareness of the utility or value of E-Commerce.

Based On the Findings, the Study Recommends the Following Measures

- The government should create a promising regulatory environment for E-Commerce to Empower E-businesses.
- Promotion of Separate E-Commerce Policy for Egypt
- Acceleration of Growth by providing logistics infrastructure
- Taking advantage of the strengths and opportunities in the ICT sector, the legal and regulatory mechanism need to be intensified with the support of ICT tools.
- Accelerating the Growth in the E-Payment activities
- Incentivizing informal MSEs to formalize with the help of suitable encouragements.

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Chapter - 11

Online Shopping Experiences in Bangladesh

Md Salauddin Palash

Abstract

The Bangladesh economy has been one of the top performers in Asia over the past decade, averaging annual growth of more than 6 per cent. In addition, per capita income is growing remarkably and is now of 1762 USD. Digital Bangladesh is one of the nation's dreams, and so special emphasis is given on the application of digital technologies to realize Vision 2021, which we commonly call Digital Bangladesh. Rapid digitalization allures the emergence of E-Commerce in Bangladesh, which boosted up due to a bigger push from its mass population (170 Million). Rocket internet, a German startup company, explored the potentiality of E-Commerce in Bangladesh and started their startup named 'Daraz', which was a multinational E-Commerce initiative operated in Pakistan, Myanmar, Sri Lanka, Nepal and Bangladesh. Daraz customized product category, order and delivery system, payment methods, return policy and customer care services to be successful in competition with other emerging E-Commerce competitors of Bangladesh. Since Daraz is a market place, therefore they are facing difficulties to keep the trustworthiness of the customer. Strong monitoring and quality control can be the key of the success of E-Commerce expansion in Bangladesh. Recently, Daraz is acquired by Alibaba, a Chinese giant E-Commerce group, and run their operation in different way and facing a challenge of acceptability to the Bangladeshi customer. They have to conduct several behavioral research to understand the local customer thoughts to E-Commerce business.

1. Introduction

E-Commerce stands for any commercial or business transactions directed over the internet. It is the combination of a large range of different processes, for example, World Wide Web, applications, electronic mail, data interchange etc. which together constructs E-Commerce. E-Commerce is helping to develop efficiency and other aspects of many businesses. Moreover, the process of E-Commerce can save both time and money for its

users by bringing all the services closer to peoples' doors. An online marketplace provides a buying and selling opportunity to people without the hassle of visiting any physical marketplace. With expansion of the number of online stores, people are confronted with more selections of items and retailers. In the meantime, it makes information more available to the customers and decision-making gets a lot easier. They can assemble and analyze many data in a short measure of time without being disturbed by sales people in comparison with any physical shops.

As a developing country, Bangladesh has many potentials to grow in different fields and E-Commerce is one of those sectors. Although the E-Commerce sector is new, as it is believed to have emerged in the last 90s, the trend is quickly catching on (Hassan, 2014). Gradually the ICT ministry of Bangladesh has been taking many initiatives for making E-Commerce sector more popular, for example, bringing in payment gateway options. Moreover, as the cost of internet and computers has decreased over the years, the E-Commerce industry is seeing an increase in business. Thus, many E-Commerce brands have now emerged both international and national.

In this current E-Commerce market, Daraz has become one of the most popular and leading marketplace of Bangladesh. Daraz Bangladesh started its operation on 2015 and since then the company has grown a lot (The Daily Star, 2015). It is a venture of rocket internet, which has many other popular businesses as well, such as, Foodpanda, Everjobs, Jovago etc. Daraz creates an online platform for different businesses to sell through the website and gives the customers a one-stop market to explore and buy from all their favorite brands online. Daraz sells various kinds of products from electronic goods to fashion items in its website through different suppliers.

The platform focuses on both B2C and B2B selling over the internet all over Bangladesh. This paper will present the E-Commerce experiences of Bangladesh by exploring business operations of Daraz online shopping and find the factors that the customers want and notify as important when it comes to online shopping.

2. Methodology

The paper was written reviewing published documents from different research theses, journal articles, intern reports, online portal and newspapers. A systematic reviewed process was used for describing E-Commerce experiences of Bangladesh focusing on Daraz online shop, a leading E-Commerce giant of Bangladesh. Moreover, some quantitative issues were

also discussed to get idea of customer perception towards future sustainability of E-Commerce in Bangladesh.

3. E-Commerce in Bangladesh

Internet penetration has increased in Bangladesh. Now in Bangladesh we have 91.94 million internet users (BTRC, 2018). Currently we have around 1000 E-Commerce portal and 25000 facebook shops. Every day the market is growing. At this moment, E-Commerce market get 20000 net orders per day (Islam, 2016). Apart from those traditional FMCG and fashions houses considering this E-Commerce as a new channel. Chronological E-Commerce development in Bangladesh are discussed below (E-cab, 2018):

Late 90s: E-Commerce started in Bangladesh in the late 90s. The earlier E-Commerce sites were actually gift sites targeted towards the Non-Residential-Bangladeshis (NRB) living in abroad. All the sites were based in abroad and had branches in Bangladesh.

Year 2000-2008: During this period, the E-Commerce sector observed slow growth. There were few E-Commerce websites but there were no system for online transaction, which was the first condition for E-Commerce. In addition, high cost of Internet and low penetration meant that few people knew about these sites. According to Bangladesh Bank, payments and transactions by credit cards were nearly BDT 11 billion in June 2008; one of the lowest in the world. The country had only about 400,000 credit card holders at the end of June 2009. From 2008, things started to look bright as Bangladesh Bank took various initiatives including implementation of e-Payment Gateway.

Year 2009: The real change came in 2009 when Bangladesh Bank allowed online payment in the country thus, officially opening up the E-Commerce sector. Another major incident of 2009 was introduction of WiMax internet in Bangladesh. It became quite popular in the country.

Year 2013: The year 2013 had been an important year in the history of E-Commerce in Bangladesh. First, Bangladesh Association of Software and Information Services (BASIS) and Bangladesh Bank jointly observed "E-Commerce Week" for the first time in the country, supported by ICT Business Promotion Council. Additionally, Bangladesh Bank gave permission to buy products and services online using international credit cards this year. Buying products and services from abroad using credit card is an important aspect of E-Commerce.

4. Major Players of E-Commerce in Bangladesh

Among all E-Commerce portal, majorities are the own business E-Commerce window and few of them are the marketplace of different categories of products. Daraz is one of the largest multi-products E-Commerce platform of Bangladesh having more than 2 million products. Daraz has some competitors who are also trying hard to grab the opportunity to get settled in this emerging market. Ajker Deal, Bagdoom, Rokomari, Pikaboo, Esho, Othoba and some of the other popular E-Commerce websites who are also becoming popular.

Ajker Deal: This is the largest local online platform; they are actually follow the e-bay model. This website starts their journey to sales different types of daily deals.

**Bagdoom:** This is another local platform funded by an Investment firm. They are direct competitor to Daraz Bangladesh.
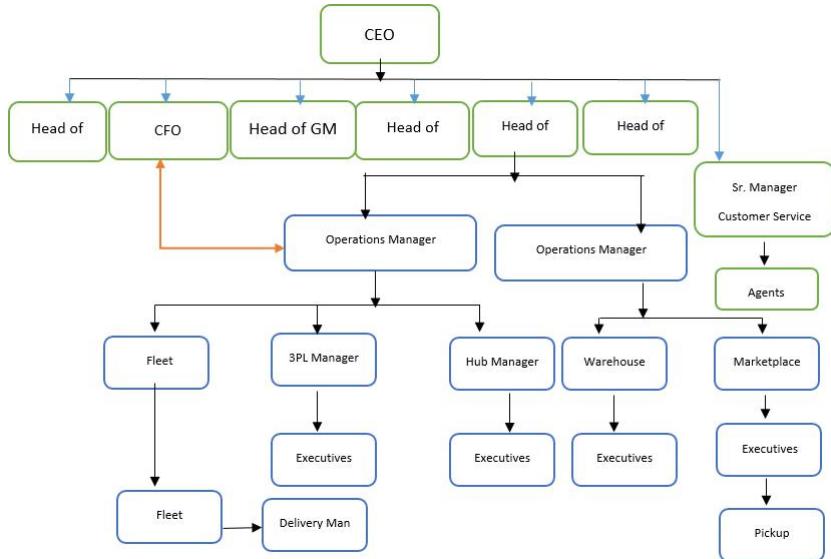
Pikaboo: This platform is mainly focusing on electronics brands of Bangladesh. As a new comer, they already grab customer's attention.

Rokomari: A trusted E-Commerce platform for selling books to the customer.

If we compare Daraz with other E-Commerce site/platforms, Daraz has better setup for content, marketing and distribution. They have the global expertise and financial backup from the parent company. The strongest part of Daraz Bangladesh is their own fleet, which cover the more than 50per cent of their distribution demand (Saeed, 2016).

5. Daraz - Company Profile

Daraz Bangladesh is a piece of Rocket Internet, a worldwide and driving incubator of new startups working specifically in web-based business. In 2012, Daraz started its operations as an online fashion retailer in Pakistan. It changed strategy and moved towards becoming a general online marketplace in November 2014. Daraz Group launched operations in Bangladesh and Myanmar in January 2015 (Abudheen, 2015 and ADN, 2015). It has been quickly developing and griping the number one position in this business sectors. Daraz Bangladesh has a youthful, energetic and entrepreneurial group of employees. They are eager to convey creative web ideas to the fast changing Bangladeshi market.

Source: Adopted from Islam, 2017

Fig 1: The Organogram of Daraz

In May 2018, Daraz Group announced that it had joined Alibaba Group's ecosystem for an undisclosed deal (Browne, 2018). This move comes about two years after Alibaba's acquisition of Lazada Group, which was also a startup by Rocket Internet Group in South East Asian market. Alibaba Group also runs Singapore's Redmart and owns stakes in India's Paytm and Indonesia's Tokopedia (Russel, 2018 and Nazberg, 2018). Daraz Group's five regional markets (Pakistan, Bangladesh, Nepal, Myanmar, & Sri Lanka) cover 460 million people with 60per cent of the population in these regions are under the age of 35 (Browne, 2018).
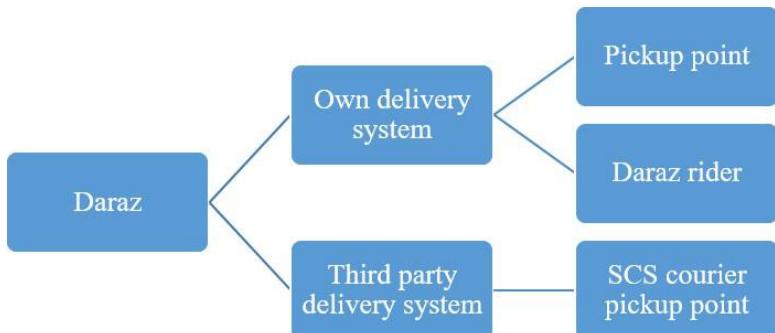
5.1. Product Category

Daraz is a medium for sellers and buyers where the vendors get to display their products and buyers get the opportunity to get everything at once. It is an online B2C kind of offering and this business model seems to have taken a positive view from the customers' side. By adding more sellers to the website, Daraz is focused to increase its customer range even more. It is a place where the buyers can find vendors easily and choose from a large selection of products. There are eleven broad categories of products available at Daraz now and these are Fashion products, Phones & Tablets, Sports & Travel, TV, Audio & Camera, Computing and Gaming, Home & Living, Baby, Kids and Toys, Beauty & Health, Appliances, and Grocer's shop.

These categories are constantly being modified to meet the customer demand. Moreover, the grocery items have been added very recently in the mid of 2017 and has seen a big success in the Bangladeshi market. Daraz always tries to make the buyers feel as comfortable as possible and tries to make the system as convenient as they can. For example, buyers can choose their preferred method such as, Bkash payment, card payment etc from many payment options. Daraz also have a 7 days product return policy from which customers can even get cash back offers.

5.2. Delivery System of Daraz

Delivery on time is one of the very significant factors that can help a company to grow its business positively. In the case of Daraz Bangladesh, around 40per cent respondents have indicated that they would put delivery system as important (Saeed, 2016).


Fig 2: Delivery system of Daraz online shopping

Daraz provides new deals every day and ultimate shopping experiences to avoid crowded shopping malls in divisional cities such as Dhaka, Chittagong, rajshahi, Khulna, Rangpur, Barisal and all over Bangladesh with cash on delivery at your home. Now with Daraz mobile phone app, you can experience best online shopping in Bangladesh with home delivery.

5.3. Payment System of Daraz

A great number of people feel that the payment system affects their purchase decision. Daraz Bangladesh provides many payment options, including, cash on delivery (COD), credit/debit card payments and Bkash, a revolutionary mobile payment system and people had agreed that this affects their experiences. About 35per cent of people believe that the payment methods given are important while around only 2per cent don't agree to this statement (Tahsin, 2017).

Fig 3: Payment options of Daraz online shopping

5.4. Promotional Activities

New customer. A welcome offer is offered for each new customer; BDT 250 is off for the minimum purchase of BDT1000 for the first order from Daraz app.

Pre-payment by debit/credit card. Ten percent off from each order up to BDT 2000, if anybody order from app using prescribed debit/credit card enjoys this offer for a certain period.

BKash. An impressive and easier mobile banking offer available in Bangladesh. Periodically bKash authority offers 20per cent discount on bKash payment with the limit of BDT 500 in total for a bKash number.

Flash voucher. In different occasions such as religious and national festival, Daraz offers flash voucher on a certain amount of purchase such as BDT 500 off for the minimum purchase of BDT 3000.

Facebook like. A newly introducing offer by Daraz. Anyone can avail the offer by liking daraz posting in facebook. After getting a certain amount of like, a customer will get a discount code to purchase from Daraz online shop.

Guess the code. Another special promotional offer. There are some unknown codes, everyday unlock each character, Guess the full code and use to get a handsome amount of discount.

Fig 4: Promotional activities of Daraz online shopping

Double benefit. If you buy this type of voucher, then you will get a double benefit from each purchase, eg. If the product price BDT 10000, you have to pay only BDT 5000. Voucher has to buy previously and offer is valid for few hours.

Flash sale. Every day three times offer new products for the customer. The offer is valid for four hours.

Free delivery. Frequently Daraz offer free home delivery for promoting its business to customer, because customer feels burden to pay delivery charge of each item.

5.5. Sales strategy

Daraz has maintained its presence on Facebook, due to the heavy use of Facebook (Social Network) locally. Daraz sponsors ads on Facebook daily that reach outs 32 million Facebook users every day (Tarik, 2018). Other than Facebook Daraz also making its mark on Twitter and on Instagram as well. They are also using personal email database to reach 1 million (approx.) customers (Islam, 2016). Daraz is using the tele network as well, by sending sms promotions to gain its potential sales possibilities.
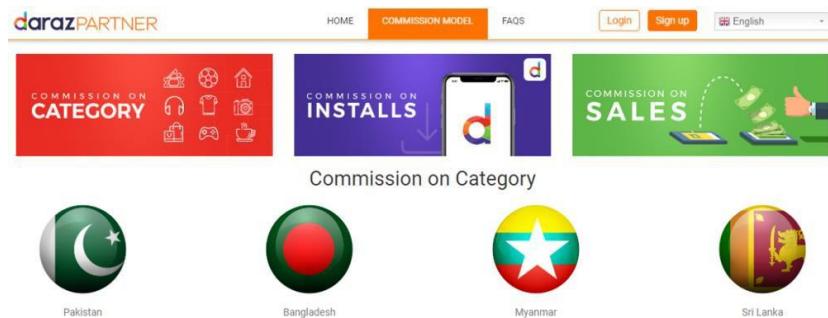
Become a Dforce Sales Consultant

Sell products supplied by Daraz and earn profits on every product sell. Possibility of simplifying the type in the name of the product, brand or

category you are interested in and we will show you all the things we have. Any customers can become Dforce sales consultant. It is free to join and you can sell Daraz products to any your customers.

Daraz University

Free access to world-class training, resources, webinars and playbook to excel in the world of eComerce.


Fig 5: Daraz partnership model of sales strategy

Daraz Partnership

Chance of being a partner of Daraz online shopping. There are three ways of partnerships such as commission on category, commission on installs and commission on sales.

5.6. Return Policy

If the product is defective/damaged or incorrect/incomplete at the time of delivery, contact within the applicable return window. Product may be eligible for refund or replacement depending on the product category and condition.

Table 1: Non-returnable items offered by Daraz

Category	Non-Returnable Items
Fashion	Custom made items, women's intimate apparel and men's innerwear cannot be returned
TVs, Audio & Cameras	Movies and Music cannot be returned
Computing & Gaming	All software products that are labeled as non-returnable on their product detail pages
Home & Living	Custom made items cannot be returned
Beauty & Health	All items in this category, except for hair removal and other electronical items
Masher Bazar	All items in this category, except for clothing, hair removal

	and other electronical items
Grocer's Shop	All items in this category
Pet Supplies	All items in this category
Digital Goods	Digital goods are any goods, which are stored, delivered and used, in its electronic format. All items in this category are non-returnable once purchased and delivered, unless it is of satisfactory quality, fit for a particular purpose and as described by the seller.

For device related issues after usage or the expiration of the return window, Daraz refer the customer to the brand warranty center (if applicable).

5.7. Issuance of Refunds

If the product is eligible for a refund, you can choose your preferred refund method based on the table below. The shipping fee is refunded along with the amount paid for your returned product.

The time required to complete a refund depends on the refund method you have selected. Once Daraz has received the product (2-3 working days) and it has undergone a quality control (1-2 working days). Table 2 shows the expected refund processing times. Noticeable, refund policy does not apply to Daraz Global products.

Table 2: Time required for getting the refund

Payment Method	Refund Option	Refund Time
All	Refund Voucher	1-2 working days
Debit or Credit Card	Debit or Credit Card Payment Reversal	9-10 working days
bKash	Bank Deposit / Mobile Payment Reversal	7 working days
Cash on Delivery (COD)	Bank Deposit	4-5 working days
Daraz Voucher	Refund Voucher	1-2 working days

6. Customer Perceptions Towards Daraz E-Commerce in Bangladesh

Tahsin (2017) interviewed 209 customers to identify the important factors of the expansion of E-Commerce in Bangladesh. When customers were asked about specific factor importance, they ranked the factors following likert scale such as very important, important, neutral, less important and not important. These points are described below:

Table 3: Customer perception ranking towards Daraz E-Commerce services

Statements	Very important	Important	Neutral	Less important	Not important
Responsible to customers	72 (34.4)	78 (37.3)	46 (22.0)	5 (2.4)	8 (3.8)
Flawless product delivery	75 (35.9)	80 (38.3)	39 (18.7)	5 (2.4)	10 (4.8)
Trustworthiness of online platform	56 (26.8)	65 (31.1)	33 (15.8)	22 (10.5)	33 (15.8)
Simpler payment system	72 (34.4)	74 (35.4)	46 (22.0)	12 (5.7)	5 (2.4)
Virtual images and products exactly match	69 (31.8)	77 (35.5)	57 (26.3)	7 (3.35)	6 (2.8)
After sell service	41 (19.6)	68 (32.5)	44 (21.1)	26 (12.4)	30 (14.4)
On time delivery	73 (34.9)	85 (40.7)	35 (16.7)	4 (1.9)	12 (5.7)
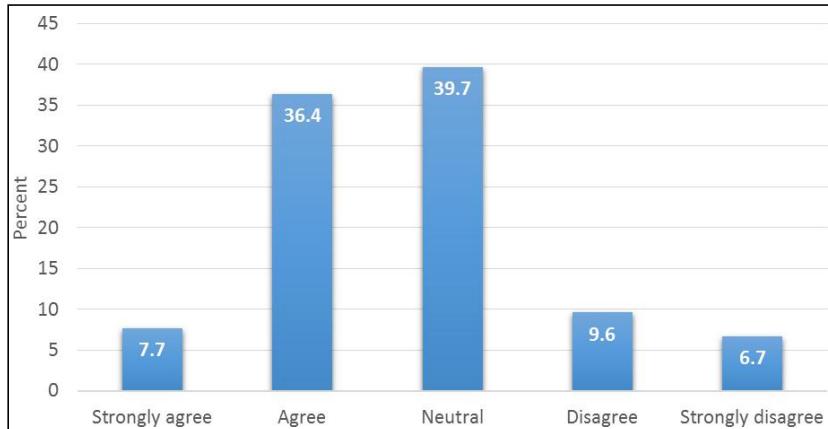
Note: Figures in the parentheses show the percentages of the total score
Source: adopted from (Tahsin, 2017)

- The highest score was given to the factor of providing flawless product delivery
- On time delivery got the most when it comes to importance between all the other factors
- After sales services were thought to be less important than other factors, which suggests that the customers expect to get the correct service the first time and not wait for aftersales to take care of it

7. Satisfaction Regarding Shopping Experience

In the case of satisfaction with Daraz shopping, respondents were mainly neutral about the topic. There are many factors that play into customers" overall satisfaction level and so far Daraz has not peaked in this section. However, there are some customers who have ranked Daraz highly regarding satisfaction but still a lot of attention needs to be given here to ensure a positive score (Tahsin, 2017).

Fig 6: Customer satisfaction level of shopping at Daraz

8. Daraz Global – A Cross Boundary Platform

Cross boundary of E-Commerce is difficult to implement in Bangladesh at this moment at B2C level because of strong monetary policy of the government. There is a chance of outgoing of USD from Bangladesh to other countries; therefore, the Bangladesh bank permitted small transaction to some extents. Daraz introduced cross boundary platform naming as Daraz global with lot of limitations.

9. E-Commerce Service Factors

Compared to other countries, Bangladesh is a late entrant in E-Commerce. Yet, this sector observed tremendous growth within a short time. E-Commerce can be the next major driver of Economic development but there are some issues that need to be addressed. Otherwise, this sector would never reach its full potential.

- Developing delivery channel to the customers
- Affordable and un-interrupted internet all over the country
- Improving the online transaction system
- Online fraudulence
- Piracy

10. Conclusion

This paper was attempted to have an overview of the E-Commerce experiences of Bangladesh that means how an E-Commerce enterprise operates their business functions considering social, economic, cultural and

political factors that can influence customers to purchase from an online store. Day by day, E-Commerce is becoming the most popular activity and part of life and it is essential to understand what are these key terms that, the companies should be looking for to provide better customer experience. Retaining customers is one of the most difficult jobs and as companies constantly worry about it, it's high time that they try to find the reasons behind customer satisfaction as well. To capture more market share, it's important to have a mix of strategies which ensure faster delivery, better aftersales service, customer care services and many other factors. Daraz Bangladesh has to focus more on implementing these elements, which was discussed in the findings section to ensure better customer experience.

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Chapter - 12

International Innovation Farm School Alliance Initiative - A 1+1 Approach

Prof. Zhou Deyi

1. Pains and Demand

1.1. Language Based Education in Management and Economics in China

Nowadays many economic and business students in China lack of social experience, motivation and goals and the teaching is mainly based on language which is from "abstract to abstract" (e.g. "rent"), hard to intrigue their interest and difficult for them to understand.

Some of the knowledge they learnt seems like the documents downloaded from internet. They are "dead" knowledge. Only the "live" knowledge that the student will use can grow continuously and survive from memory loss. And only when students have the motivation and goal or problem to solve their learning will become more efficient. It is a kind of pseudo life, dismal knowledge with students and others. Continued reading or conversing with the knowledge enriched teachers may promote their understanding and make them fit to the environment.

1.2. Demand of Globalization on Belt and Road, Cultural Exchange

With the transportation and E-Commerce development, globalization is the trend. While harvest the benefit from trade and investment, international companies and politics have been facing internal and external cultural conflicts. Students need to have an open mind towards all culture. For this end, earlier time interaction with people from other culture is very useful. Furthermore, under the initiative of Belt and Road initiative, more and more international students and business people come to China. Meanwhile, Chinese companies go out for business opportunity. The talents with diverse cultural experience are very much essential and a welcome approach.

1.3. Importance of Physical Work

Physical work in early time is extremely important for maintaining a

healthy physical and mental conditions. In addition, it is also an important one to understand the world. Learning by Doing (LBD), Learning by Watching (LBW), Learning by Listening (LBL) and Learning by Reading (LBR), each concept has different information losses comparing with the real world situation. Among all these, LBD is the concept in which the people can have least information losses from real world situation and the people who do more physical job may have better understanding of the real world problems, which is crucial for the students to study the theory and then they can do the academic research in a better way. Furthermore, physical work also instil the confidence and willpower of the people which are of much importance to overcome the hardship and frustration later on in their life.

1.4. Demand In-Depth Tourism

Nowadays more and more people spend their time in tourism not only for recreation but also for educational importance. Almost all the farm varsities have their students in training them through the exposure visits to the national institutions of agricultural and allied importance. Such exposure in the international arena adds cultural differences and their socio economic expertise builds confidence to the tourist aspirants or the students migrated for further specialized education. To live in the countryside is a good way to understand the culture and people in depth. There are a lot of mature farm stay tourism model available across the developing and the developed world which adds advantage to knowledge development.

1.5. University Entrepreneurship Program

The information revolution and the knowledge explosion gave the youth a chance to explore in many aspects and surpass the seniors. To encourage their trial, bring up the burgeoning idea, challenge their potential, and release their energy, many universities in the world set the incubators and the training program, and give the youths the chance to demonstrate and implement their idea. There is a need for a formal design for such training program. Here, the importance of assessing the training needs and the knowledge gaps is also of much importance.

1.6. Academic Research

There is more and more international cooperation along the belt and road countries, which generate the demand for policy and academic researches. The field trip and personal contact programs are indispensable.

2. Our Practice
2.1. Practice Based Education

Two African students worked in Bishan farm with Chinese farmers to raise chicks and grow rice for 35 days. And they had chance to visit Baishazhou wholesale market, and one visited Kashgar. Some international and Chinese students visited Hangzhou and Yiwu together. I just paid for a visit to Egypt and Mongolia together with international students. Every day we discussed what we saw and what we can conclude. Sharing the common experience and discussing the common phenomena with students are more effective and expensive way for knowledge transfer in social science. One student chose his thesis topic based on his experience in the farm.

We are organizing the entrepreneurship project that open an account in Ali-Express to do real business of cross-border E-Commerce and this forum secretariat are mainly students. I believe they will learn a lot from this experience.

Practice based education is from "Concrete to Abstract", just opposite to the language based education. It is the whole body based learning, rather than central neural system based learning. Practice based knowledge is learnt by stronger stimulation (multiple stimuli) and thus unforgettable. Practice based knowledge can show how pure knowledge exists in its original form hidden the complex reality shaped by multiple dimension logics. Of course, the abstract knowledge in the textbook and logic is important, but facts tell their truth by themselves easily. The direct and concrete plus abstract knowledge from textbook are more powerful.

After students have a real "touch" with original knowledge and they can read books by themselves and get into the mind of others easily. Furthermore, stimulated by real world phenomena, students are easily motivated to study knowledge by themselves.

2.2. Young Student Voluntary Work

We organize the student voluntary teaching work in Bishan farm to teach local children the skills in dance, music, handicraft, calligraphy and scientific experiments, which gave the children the company and open their eyes, also bring the community the impacts that they have never seen the voluntary work before. Work for nothing! Unbelievable. The volunteers themselves also had a chance to go out of the textbook and have a rehearsal of real life and get touch in to the reality. I felt the power of love and contribution.

2.3. International Experience

I have the chance to visit or work in Mongolia, Botswana, Ethiopia, Mozambique, Egypt, Thailand, and the Netherlands for different period of time. These trip shaped my attitude towards diverse cultures and become open minded.

3. "1+1 Innovation Farm School Alliance" Vision

3.1. Mission and Vision

Our mission is to improve our education and develop the potentiality through farm practices under the constraints of environment protection, poverty alleviation, technology transfer and social equality during the globalization.

The vision is to build the innovation farm school among the world together with University.

The farm here is not just for agriculture only. It is the comprehensive platform and physical space for innovation in environment protection, cultural experience and information technology. It may act as the incubator as well.

3.2. The Organizational Culture

The innovation farm school alliance is a decentralized NGO. It is "our" collectively constructed and shared network. All partners have the freedom to choose and quit based on their voluntary acceptance for the mission and vision of the alliance. And they have clear responsibility and benefit, at the same time they can benefit from the network in terms of knowledge sharing and service co-operation.

3.3. Integration with Existing University Education System

The new system should be integrated with existing education system.

First year, students follow their curriculum. Supervisor identifies the potential students who are performers and have the interest in farm innovation program.

Second year, interact with the candidates, cultivate the business ideas and have some farming work experience during the weekend.

Third year, based on students' own interest and talent and the cooperation with international supervisors and demand of foreign countries, some candidates might be sent to target countries for internship and carry out the planned projects during the summer vacation (one month). They can

learn some local language.

The fourth year, based on the performance of last year, if students still want to further develop the results, they may be sent out to work longer time or they can start joint program together with their partners they know from last year experience.

3.4. Integration with University Entrepreneurship Training Program

So far there are some entrepreneurship training program in university education system. This innovation farm school program may be well integrated with the existing program.

3.5. Voluntary based, University Supported and Informed Choice

International internship is not very much easy. They may be facing social, health risks and cultural shock, and must be forced to incur some cost. Supervisors and universities should tell the students about the real situation and let the students and their parents to make informed decisions. In principle, students themselves should pay the air tickets. They should make reasonable decision to go or not to go only when they need to pay the cost by themselves. The innovation farm should provide the accommodation free since the international students may bring some value for the farm.

We accept the donation from society. The money will be used for talent students. Universities should provide voluntary teachers to supervise students, design the projects, take care of the security and miscellaneous life, and discuss the knowledge in the work. Supervisors are expected to work and live together when students are there. If possible, teachers' work should be counted as the teacher's workload in the University, and the universities should subsidize the program somehow.

3.6. Project Design and Supervision

The international trip is not the tourism or recreation. Each student should have the clear goal for the trip. Thus the project design is necessary. The whole task and everyday work should be clear before they leave. And the evaluation and summary report are required as well. The project design can be done by the cooperation between international supervisors. It is better to be the part of their production.

3.7. Include but not only University Students, Open Recruitment

The students taking part in the program can be students in the university, but it can be youth from other universities or institutes. People with less education might be closer to reality and have more independent thinking.

They are doers. They should not be ignored. Innovation farm school is an open platform.

3.8. Mutual Benefit of Innovation Farm School Alliance

Within the farm alliance, all the partners provide the visa application, local information and service at the price covering the cost or free.

Cooperative farms may benefit from international exposure that may improve their reputation and attract the tourists.

3.9. Feasibility Analysis

Essence of these farm alliance is a kind of trade in which each partner use the cultural resource for the cultural experience of others. And the cultural experience within one country is cheapest and has the soaring value for the people from other cultures. Thus the social surplus is huge.

Cooperation in research and joint venture may even generate more benefit for researchers and students at first and society at last.

Farms may provide cheaper living cost, cheaper food and house. Farm school is also relevant to agriculture, environment protection, poverty alleviation which are topic for agricultural university specifically and society in general.

From farmers people can easily understand local and original culture. So it can be used for an in-depth international agro-tourism Farms are compatible with cross-border E-Commerce (oversea warehouse). Farm location is better to close to the city, but not in the city.

4. Initiative in 2019

4.1 Recruiting International and Domestic Volunteers for Digitalized Farm Construction in Bishan Farm, China

1. The Tasks

Participants can have chance to work with Chinese farmers, and experience rural life of China.

They will participate in the digital farm construction and feeding animals. The digital farm construction work include internet, GPS based free range animal system, Internet of things based monitor and power control system.

They may try to design a food safety system based on the block chain technology.

They can also initiate their own projects or teaching program (such as language or art program) for local children or whatever else based on their own resources/interest. If they want to do so, it is better to discuss with the local and international supervisors and submit their plan for review at least one month before they come here.

2. Requirements

Participants are expect to have good health and the passion and motivation for innovation. They are expected to do physical work half day and half day rest or study based on their own voluntary choice. There is some construction work and farming work in the farm. If necessary, some field trip in China will be arranged. Students from China and other countries are encouraged to form a team.

3. Supervision

Supervisors from HZAU will be responsible for their security and life in the farm. They need provide consultation for projects and future development.

4. Time

Application: 2019.1.1-2019.2.30

Operation time: 2019.7.10-2019.8.10

5. Finance

The international tickets should covered by participants themselves. All accommodation in the farm and field trip in China are responsible by the farm.

4.2. Kashgar entrepreneurship training program in cross-border E-Commerce

4.3. Farm school in Egypt, possible?

4.4. Farm school in Mozambique, cement brick making business

4.5. Internet based Python learning program

4.6. Distant education in physics and science

4.7. Other Programs

- Environment Protection (plastic)
- Agricultural technology demonstration
- Cross-border business start-up

5. Suggested Topics for Next Forum in 2019

5.1. Trip along the farm school network in Belt & Road countries

5.2. Research, Training and Business trinity on cross-border E-Commerce

5.3. Progress in farm school network

5.4. Cross-border E-Commerce practice and training

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Chapter - 13

E-Commerce in an Island State of Barbados

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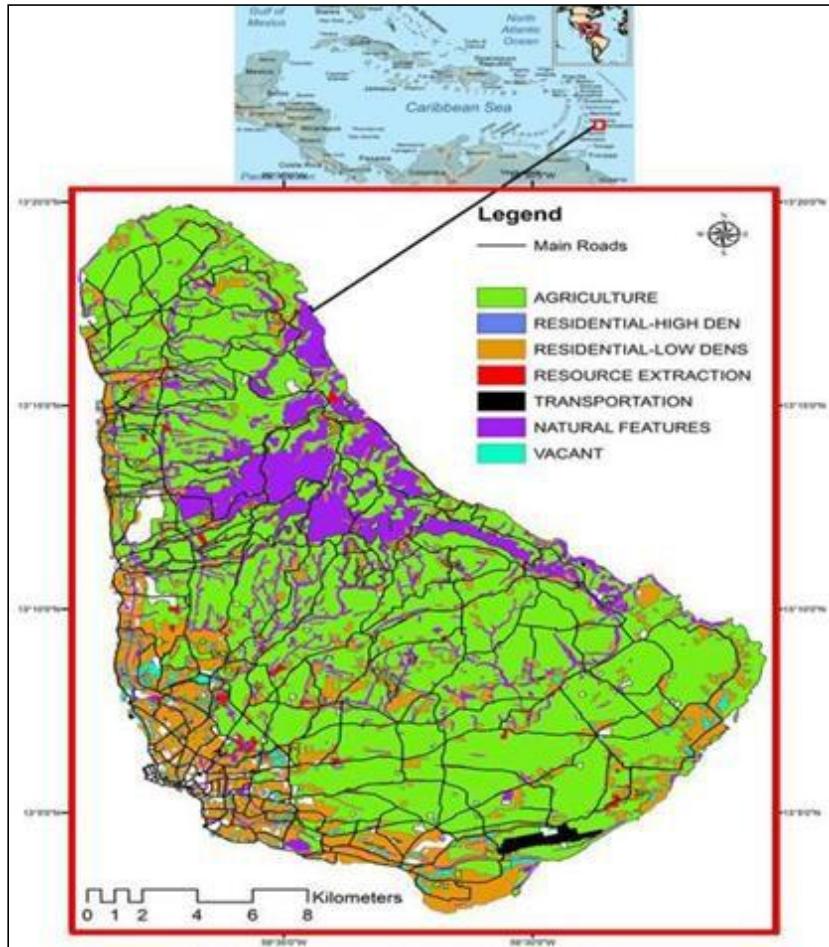
Abstract

In many Small Island Developing State (SIDS), agricultural sectors failed to meet growing demand on food for growing population and tourism sector. Most of those countries depends on food import to satisfy the demand on food, especially vegetable and root crops. Production and marketing challenges facing the food sector in Small Island developing States have received little attention in literature. In this study, we investigated the trend and characteristics of the vegetable and root crops market in Barbados as an example for SIDS Islands. Employing secondary source data and market survey information, the market trend, gap, concentration, and channels for the major vegetables and root crops are estimated. Our findings indicate that climate change, poor farming management, limited human resources skills and weak market linkage were the main factors that hinders improving the food sovereignty in Small Islands such as Barbados. Adapting new technologies such as drip irrigation and greenhouse could be a useful adaptation measure to achieve high level of food security.

Keywords: Food Sovereignty, Marketing Channel, Vegetable Crops, Root Crops, Climate Change

1. Introduction

Barbados located in the Eastern Caribbean and has a land area of 430 km^2 and a population of 285,719 during the year 2017. Of the total land area, around 44 per cent has been classified as agricultural land, the majority of which is used to grow sugarcane (Figure 1). Approximately 10 per cent of the working population makes their living from agriculture and it contributes only 2.80 per cent to Gross Domestic Product during the year 2017. In recent years, cultivated agricultural land has declined while more land is being left fallow, reforested or given to housing developments (Gohar and Cashman, 2016).

Fig 1: Barbados land use categories
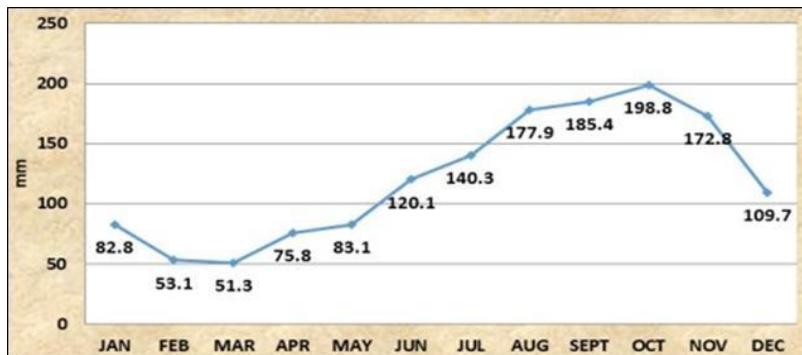
Barbados is predominantly a coral limestone island, which covers some 86 per cent of the land area. The coral cap lies on top of sediments of oceanic origin, which make up the remaining 14 per cent of the land area. In comparison to the limestone, the oceanic sediments are relatively impermeable. Due to its geology, Barbados has no significant perennial surface water resources. Groundwater is the only significant source of water on the island.

Barbados's economic freedom scored 57, making its economy the 117th in the 2018 world Index. Its overall score has increased by 2.5 points, with significant improvements in judicial effectiveness and government integrity outweighing declines in scores for the investment freedom and labor

freedom indicators. Barbados is ranked 24th among 32 countries in the American Region, and its overall score is below the regional and world averages. Increases in arrivals and spending by tourists have helped economic growth in the past year in Barbados. Barbados is a one of the most developed islands in the Western Caribbean Region. The country receives considerable number of stay-over tourists and cruise ship passengers every year. Yet, Barbados's agricultural sector, like many other Caribbean States, failed to meet growing demand on food for growing population, and tourists (Kendall and Petracco, 2009), especially the vegetable and root crops. The country imports large amount of vegetable crops such as carrot, melon, pumpkin, lettuce, cabbage, tomato, and sweet pepper. Imports rate between 84 per cent for carrot and 48 per cent for sweet pepper in addition to 83 per cent of its consumption of onion. Furthermore, vegetable and root crop prices are higher comparing to other Caribbean Islands and the average world prices, despite that the quality is not at high standards.

1.1. Climatic Conditions in Barbados

Barbados has high venerability to the climate change and variability. The country depends completely on rainfall that feed the aquifer system to meet water demand for households, industrial, agricultural, and environmental activities (Gohar and Cashman, 2018). In recent years, a perceptible change in rainfall density and time shifting have been noticed, where the country experienced a dry season in 2015 that continue to 2016. While no much changes in temperature, changes in precipitation highly affected the agricultural and food production. Agriculture in Barbados is mainly rain fed therefore; the decline in rainfall caused a significant reduction in vegetable and root crops production in 2015 and 2016. This reduction in vegetable and root crop production caused higher imports of those crops for the same time period. Investigating the average monthly precipitation in Barbados for the last 24 years illustrate that the country has a peak season of rain between August and November, while the rainfall decline between February and May (Figure 2).

Fig 2: Monthly precipitation for Barbados in mm (1989-2102)

The Maximum and average monthly temperature seems to be more stable for the Island. The expected maximum temperature up to 2100 shown in Figure 3 demonstrates expected monthly maximum temperature to be ranged between 29.2 °C in February to 31.6 °C. The mean temperature for the Island also ranges between a minimum of 24.6 °C for February and a maximum of 27.3 °C for the month of August.

Despite its small area, the annual rainfall varies across parishes. In term of rain density, the dry season for the entire Island starts from February to May and the wet season reach the peak on October. Yet, the monthly rainfall is fluctuated over the last decades indicating that the Island has experiencing a variability in annual rainfall density. For rainfed irrigation, low or intensive rains could be a challenge for the agricultural production, especially vegetable and root crops that have higher sensitivity to water needs (Gohar and Cashman, 2016). Flood can make a severe damage to the vegetable crops, while the same damage could take place under water deficit. In that case, intensive agriculture and irrigation technology such as drip irrigation would be essential to preserve high yield of the vegetable and root crops (Flachsbarth *et al.*, 2015).
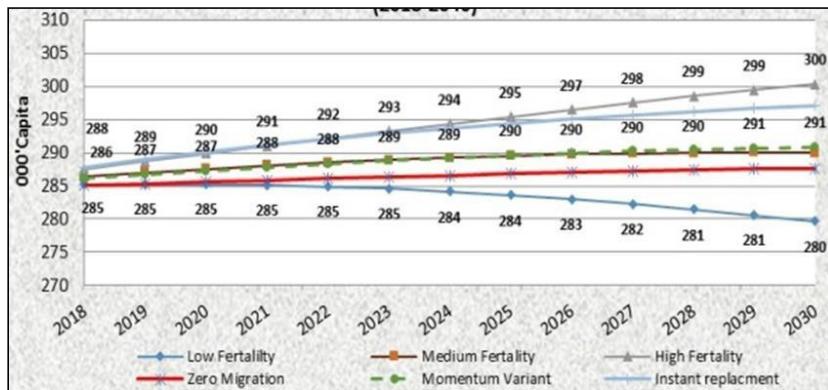
Fig 3: Projected monthly maximum temprature (TMax) and mean temprature (Tmean) for Barbados up to 2100

1.2. Population

The total population of Barbados has been increased from 252 thousand capita in 1980 to 285.7 thousand by the end of 2017 (Figure 4). The percentage of female recorded 52per cent to the male 48per cent for the same period. Yet, the yearly change in total population has been decreased from 0.5per cent in 1980 to 0.23 per cent in 2017. For the same period, the net migration has dramatically turned over from negative net migration of (-719) person in 1980 to a positive net migration of 414 person in 2017. The country is expected to continue with declining population growth rate in future based on the estimation of the United Nation. Figure 4 illustrates different projection of the population for Barbados up to 2030 under different scenarios based on the United Nations, Population Division, Department of Economics and Social Affairs 2017. Those scenarios include low fertility, medium fertility, high fertility, zero migration, instant replacement, and momentum variant fertility assumptions.

Based on those assumptions, the population of Barbados is expected to continue to grow in the short run and then it will start to decline under all assumptions, except the high fertility scenario. The major different among those assumptions is the time required for population to decline and the magnitude of that decline. The low fertility variant scenario suppose that the population will start to decline by 2023, medium and constant fertility assumptions expect the decline by 2034, while the instant replacement and zero migration assumptions assume the decline to take place after 2039, and finally the momentum fertility variant assume the decline to start by 2038. That is, the total population of Barbados expected to grow up to the mid thirty of this Century under all scenarios except the low fertility variant scenario.

Fig 4: Projected population for Barbados under different scanarios (2018-2040)

1.3. Labor Market

Unemployment rate in Barbados for 2017 was 10 per cent, registering an increase of 1.0per cent from the rate of 9.0 per cent recorded at the end of 2016. According to the Barbados Statistical Service data, unemployment rate among males stood at 9.8 per cent and 10.1 per cent among females. The total number of employed persons was 129,900 in 2017, while unemployed labor estimated to be 14,400 in total. In 2017, the Wholesale & Retail Trade sector generated jobs for the largest number of persons, employing 20,300 persons, while the Accommodation & Food Services sector employed 15,000 persons. Agricultural production in Barbados depends on the family labors especially for the small size farms. Recently, immigrants from other Caribbean countries and South America form most of the agricultural labor in Barbados. Higher wages in tourism and service sectors in addition to other factors contribute to make agriculture as low attractiveness for Barbadians (Coppin, 1994). Yet, low labor productivity and limited financial capacity are other challenges that faces the development of the agricultural sector in Caribbean (Smith *et al.*, 2017; Thomas-Hope, 2017), and in Barbados especially.

2. Industry Description

Several Caribbean countries are depending on food imports to meet the food security requirements (Shrivastava, 2003). Barbados food security relies on imported food to meet growing demand on food for households and tourists. The Barbadian economy is centralized around the tourism sector as a leading sector. Recently, increased international food prices, transportation costs, climate change, and financial challenges that face Small Island Developing States (SIDS) call for more reliance on local food production

(Andreatta, 1998; Baker *et al.*, 2015). In Barbados, different governments have stressed the need for improving the domestic food security by encouraging local food production and encouraging private sector and youth to involve in agriculture. Yet, agricultural sector in Barbados contributed by 2.8 per cent to the national GDP in 2017. Historically, the agricultural sector in Barbados centralized around the sugarcane production (Wallman, 2018). However, the cultivated area and production from sugarcane is declining gradually and sugarcane land turning to housing, commercial building, and even vacant lands. Some of sugarcane producers turned to other agricultural activities including vegetable, root crops, herbs, poultry, animal production, and agro-tourism.

2.1. Key Market Influencers

The quantity and quality of domestic vegetable and root crops have chronic problems such as supply inconsistency, low quality, and small segment of supplies. In recent years, several supermarkets and hotels started to import the vegetable and root crops directly. Yet, long transportation time could result in damages or reduce shelf life of sensitive vegetable crops. Climate condition is another factor that contributes to high inconsistency in domestic vegetable and root crops supply. Small size farms present major vegetable and root crops supply. Local farmers are unable to supply specific vegetable and root crops that are sensitive to climate conditions such as tomato, lettuce, and onion in rainy seasons. Another challenge is the low quality of produced vegetable and root crops required for hotels and restaurants, with almost no postharvest services are conducted for those crops. The high capital investment required for adapting modern agricultural technology such as greenhouse and hydroponic are also contributes to slowing down the sector. The lack of professional skills and experienced agricultural labor are important factors contribute to the diminishing of vegetable and root crops sector in Barbados. Finally, the high cost of production including the materials and labor cost stand as a barrier of developing sustainable vegetable and root crops production.

2.2. Market Trend and Concentration

Table 1 illustrates that over the period of 1999 to 2017, the total domestic production of vegetables declined, where the total vegetable production decreased from 10,002 tons in 2003 to 2,602 ton in 2016. That is, the domestic vegetable production declined by almost 74per cent in 2016. In 2017, the production increased slightly, where the country produced around 3,729 ton of the vegetables. Yet, the reduction was more significant for bean,
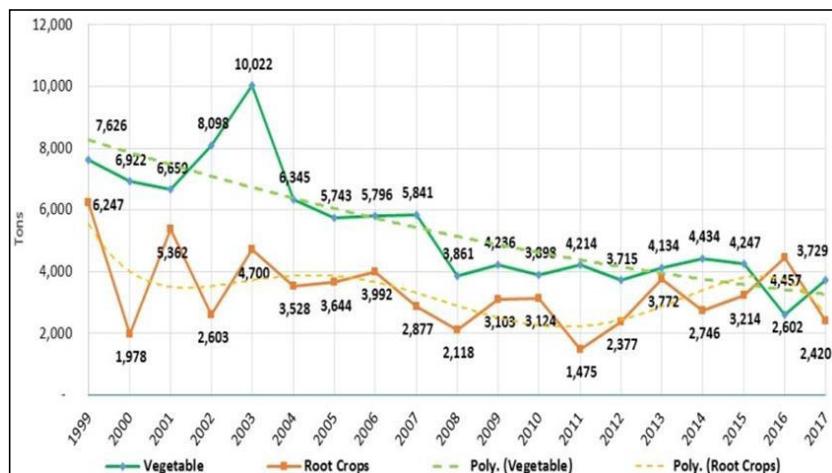
beet, carrot, pumpkin, and the tomato, while incremental increase in the domestic production of lettuce, cabbage, and sweet pepper are taking place recently. The domestic production of vegetable has been concentrated in few products, where the production of eight crops; cucumber, tomato, carrot, okra, cabbage, sweet pepper, bean, and lettuce formed 84per cent of the total production of the vegetable in Barbados. Those crops contributed to this concentration by 20per cent, 15per cent, 10per cent, 9per cent, 8per cent, 8per cent, 7per cent, and 7per cent respectively. In contrast, six vegetable crops made 75per cent of the total production of the year 2016, where the lettuce production ranked the first by 17per cent followed by tomato and cabbage by 15per cent and 13 per cent respectively in addition to 10per cent for each of cucumber, okra and pumpkin. In 2017, the production of cucumber, lettuce, cabbage, tomato, okra, and sweet pepper made 74per cent of the total vegetable production in Barbados.

Table 1: Total Domestic Production and Concentration of Vegetables in Barbados (1999-2016) in Tonnes.

Year	Beans	Beets	Cabbage	Carrots	Cucumbers	Lettuce	Melons	Okras	Peppers (Hot)	Peppers (Sweet)	Pumpkins	Tomatoes	Cassava	Eddoes	Sweet Potatoes	Yams	Onions	Peanuts
1999	848	247	1015	1735	991	551	184	341	215	214	384	902	329	245	2710	2205	687	71
2000	896	160	781	1025	700	832	217	567	317	254	520	654	490	178	735	306	142	128
2001	1023	218	664	1346	679	494	213	420	296	180	462	663	342	197	2898	1818	54	53
2002	394	76	501	800	1702	156	281	1289	610	1108	265	917	397	48	1468	349	311	30
2003	505	155	640	1012	2018	279	343	1466	640	1264	466	1234	412	44	2610	1234	338	63
2004	244	218	432	827	1362	317	376	570	323	549	291	837	317	115	1913	603	551	28
2005	343	99	405	467	1388	285	380	495	114	575	204	987	199	175	2084	818	347	23
2006	371	92	642	318	1324	439	310	525	137	478	121	1041	375	157	2201	794	444	21
2007	252	110	254	305	1450	418	477	658	114	420	160	1224	448	151	1335	647	287	9
2008	168	29	438	253	812	144	185	424	124	221	249	815	466	41	884	280	424	24
2009	170	52	254	198	1120	572	243	245	178	294	191	719	691	24	888	824	626	50
2010	222	31	60	264	1148	339	241	303	76	318	180	718	400	228	1176	807	498	16
2011	270	49	262	146	1145	499	156	312	83	314	166	813	308	20	507	243	393	5
2012	226	29	311	245	814	171	195	264	65	175	188	1033	185	65	1211	347	550	19
2013	112	32	18	296	824	213	382	216	48	488	529	977	1038	173	1218	752	504	87
2014	109	24	323	310	994	313	319	264	93	396	508	781	553	75	1232	567	315	5
2015	150	43	361	271	811	460	401	290	89	330	308	734	379	157	1335	578	758	8
2016	137	84	338	135	250	440	198	261	38	137	249	337	491	250	2898	378	429	11
2017	265	13	471	158	715	587	226	341	148	304	169	332	479	161	1167	181	411	21
Ave	155	39	302	234	719	402	305	274	83	331	353	632	588	163	1570	491	483	26

Source: Ministry of Agricultural Annual Reports

The total production of root crops is taking a declining trend despite the improvement in domestic production for the last three years of 2014, 2015, and 2016. Yet, the total production of the root crops is declined sharply in 2017. The total production of the root crops dropped from 6247 tonnes in 1999 to about 2420 tonnes in 2017. Table 1 showed that the decline in root crops concentrated in peanut and yam, while the country has been back on track to recover the production of cassava and sweet potatoes. The increased production in sweet potato and cassava were mainly due to the government programs that have facilitated the involvement of private sector and small farmers in developing the cassava and sweet potato flower for bakery industry in Barbados. Minimum filed work and higher tolerance to climate change were found to be the main reasons for increased production of these two crops. Four crops viz., sweet potatoes; yam; cassava and onion formed 94 per cent of the total production from domestic root crops for the average period of 19 years from 1999 to 2017. These crops contributed to the level of concentration by 47 per cent, 20 per cent, 15 per cent, and 14 per cent respectively. The same four crops continued to form the main production of the root crops even up to 2016 with slight change in these yield. The sweet potato continues to occupy the largest production by 65 per cent followed by cassava, onion, and yam by 11 per cent, 10, and 8 per cent respectively. In 2017, the concentration of those crops continued to take the same trend, where sweet potato ranked the first followed by the cassava, onion, and yam. Those crops formed 92 per cent of the domestic total production of root crops during the year 2017.


Fig 6: direction of domestic production of vegetable and root crops, Barbados in tons (1999-2017)

2.3. Industry Direction

Since 1999, the consumption of vegetables in Barbados relies on imports. The total imports from the main vegetables increased from 1903 Metric Ton (MT) in 1999 to 3634 MT in 2017 making an increase of 90 per cent. The significant increase in the total vegetable imports correlated with the decreased trend of domestic vegetable and root crops production for the same period. That is, the shortage in domestic production is compensated by import of vegetables to satisfy the growing demand on those crops. Increasing trend in the imports of all the vegetables, except the beans, cucumber, and okra, with a serious shift towards increased imports of other vegetables taking place since 2014. Increase in imports ranged from 431 per cent for lettuce to 25 per cent for Cabbage in 2017 compared to the imports from the same crops in 1999.

The imports from vegetable crops for the period of 1999 to 2017 is concentrated in carrot, melon, cabbage, lettuce, and pumpkin by 21 per cent, 18 per cent, 17 per cent, 15 per cent, and 13 per cent respectively to make around 84 per cent of the total imported vegetable crops. The rank and the importance of the vegetable crops in the import concentration changes in 2017, where the lettuce ranked as the largest imported crops accounted 22 per cent in addition to the carrot by the same importance. The import of cabbage slightly decreased comparing to the historical average to represent 16 per cent of the total imports of vegetable in 2017 followed by melon and Tomato. Those crops formed 82 per cent of the total mass imports from the vegetables to Barbados in 2017.

The same trend has been recorded for root crops but at lower level, where the import volume increased by 17 per cent for the same time span. The imports from the root crops start to slow down recently as the country has progressed in the production from main root crops such as sweet potato and cassava. Still, the imports from the onion are growing at steady rate. Unlike the vegetable crops, the imported volume of root crops during the same period is concentrated in one crop; onion, in which it represented 90 per cent of the total average import of root crops. Onion import tend to be stable with small tendency to increase in the last 5 years. Similarly, the value of onion imports stands for 85 per cent of the average total value of root crop imports during the same period. The analysis of onion import price illustrates a high correlation between the volume of domestic production, import volume, and import price.

2.4. Growth in the Production of Vegetables and Tubers

Table 1 has given the details of production of vegetables over a period of time. Here it has been projected to analyze the deviations in the production of vegetables and tubers in a seventeen year period of time is analyzed and the details are presented in the Table 2.

Table 2: Percentage Change in the Out Turn of Vegetables and Tubers

S. No	Name of the Vegetables	Production in Tonnes		Percentage Change during 2017 over the year 2000
		2000	2017	
01	Beans	896	265	(-) 70.42
02	Beetroots	160	13	(-) 91.82
03	Cabbage	781	471	(-) 39.69
04	Carrots	1025	158	(-) 84.58
05	Cucumber	700	715	02.14
06	Lettuce	832	587	(-) 29.45
07	Melon	217	226	04.15
08	Okras (Bhendi)	567	341	(-) 39.86
09	Hot Pepper	317	148	(-) 53.31
10	Sweet Pepper	254	304	19.69
11	Pumpkin	520	169	(-) 67.50
12	Tomatoes	654	332	(-) 49.24
13	Cassava	490	479	(-) 02.24
14	Eddoes	178	161	(-) 09.55
15	Sweet Potato	735	1167	58.78
16	Yam	306	181	(-) 40.85
17	Onion	142	411	189.44
18	Peanuts	128	21	(-) 83.59
19	Total	10902	8166	(-) 25.96

Table 2 outlined that the overall reduction in the vegetable production activity in Barbados is found to be declining to the tune of 26 per cent. Among all these, production of Onion is found to witness an increased production to the tune of 189 per cent during the period of 2017 over the year 2000. Similar increase is witnessed in the production activity of Sweet Potato, Sweet Pepper, Melon and Cucumber. But these increase in the period of 17 years is very much inadequate to the population. It might be due to the non-adoption of modern production technologies at field. In this circumstance, the Department of Agriculture and Department of Horticulture should take appropriate efforts to enhance the production of Vegetables and tuber crops to meet the increasing population in the Barbados. Barbados has

to initiate greater efforts in the production activities by taking consultancy from the developed state like India and China.

Table 3: Forecast on the Production of Vegetables and Tubers in 2020

S. No	Name of the Vegetables	Production in Tonnes		Forecasts for the Year 2020
		2000	2010	
01	Beans	896	222	300
02	Beetroots	160	31	15
03	Cabbage	781	60	521
04	Carrots	1025	264	184
05	Cucumber	700	1148	749
06	Lettuce	832	339	591
07	Melon	217	241	226
08	Okras (Bhendi)	567	303	368
09	Hot Pepper	317	76	169
10	Sweet Pepper	254	318	315
11	Pumpkin	520	180	174
12	Tomatoes	654	718	345
13	Cassava	490	400	458
14	Eddoes	178	228	162
15	Sweet Potato	735	1176	1206
16	Yam	306	807	195
17	Onion	142	498	387
18	Peanuts	128	16	24
19	Total	10902	9035 (-) 17.13	6389 (-) 41.40

The forecast figures for the year 2020 outlined that the production of vegetables and tubers will be further lowered from 2010 and the reduction in the production will be to the level of 41 per cent when comparing the base year 2000. The reduction during the year 2010 was found to be only at the level of 17 per cent. But the production of vegetables and tubers further be lowered during the year 2020 to the level of around 41 per cent outlined that the Government machinery is not much concentrating on the aspects of enhanced productivity of these vegetables. Instead, import has been geared to meet the consumption requirements of Barbados population.

2.5. Market Size and Scope

Barbados has achieved full self-sufficiency from okra, while high self-sufficiencies are achieved from beans, cucumber, hot pepper by 98 per cent, 98 per cent and 92 per cent respectively during the period of 2001 to 2017. Yet, the country is still has low self-sufficiency from major vegetables including beetroot 25 per cent, cabbage 58 per cent, carrot 53 per cent, lettuce 68 per cent, melon 57 per cent, sweet pepper 30 per cent, pumpkin 41

per cent, and tomato 19 per cent. For the root crops, the country has high self-sufficiency from cassava, yam, and sweet potato that ranges between 98 per cent and 97 per cent for the same period. The country still relies on imports to meet the demand on onion, peanut, and eddoes by 80 per cent, 72 per cent and 52 per cent respectively. The total value of imported vegetables in FOB prices reached 9.1 Million Bds $ in 2017, in which five crops of cabbage, carrot, lettuce, sweet pepper and tomato form 97per cent of the total value of imports. Moreover, the imported value of root crops reached 2.1 Million Bds $ in 2017 and concentrated in onion by 1.7 Million Bds $ or 81 per cent of the total imported value of root crops. Therefore, the five vegetable crops in addition to onion represented 92 per cent of total import value of the vegetables and root crops in 2017.

Using the available demographic information and most recent average consumption per capita, we estimated the future demand on the main vegetable and root crops. The momentum variant fertility scenario for the population growth is used in addition to the 2017 average consumption per capita of the vegetable and root crops in Barbados to estimate the demand on those crops for the following 10 years. Demand on all vegetables and root crops is found to be increasing at decreasing rate for the following 10 years. Despite low level of per capita consumption of vegetable and root crops, the domestic production is unable to meet the growing demand of vegetable and root crops. We estimated a growing demand in the future coming years, where the market has a gap in all vegetable and root crops. We estimated the market gap to be the different between the expected demand and the domestic production. In such a way, the market gap accounts for the import and the normal growth in the demand from population growth. The market gap was high for crops such as onion, cabbage, tomato, sweet pepper, pumpkin, and the carrot.

2.6. Market Segments and Channels

2.6.1. Restaurant

There are 127 restaurants registered in Barbados Hotel and Tourism Association (BHTA). Those restaurants include different scales based on seating capacity and provide wide varsities of food cuisines. About 32 restaurants have a seating capacity over 100 seats, 49 restaurants have capacity between 99 to 50 seats, and 22 restaurants have less than 50 seats capacity, while 24 restaurants did not provide information about their seating capacity. Those restaurants distributed among nine parishes, where the majority are concentrated in Christ Church by 51 restaurants, St. James by

44 restaurants and St. Peter by 12 restaurants. The rest of the restaurants distributed between St. Philip, St. Michael, St. Joseph, St. Andrew, St. John and St. George.

According to the marketing research, 60 per cent of the restaurants are trying to use domestic vegetables and root crops. Yet, due to the shortage of domestic vegetable and root crops, they use imported products. Furthermore, 75 per cent of the restaurant owners and chefs indicated their willingness to use domestic vegetables and root crops. This percentage varies according the size of restaurant, where 100per cent of small restaurants showed high interest of localizing their source of vegetable and root crops, while 70 per cent of the medium restaurants showed the same interest, and finally 66per cent of the large restaurants expressed their interest in using local vegetable if it becomes available and consistent over the year. Table 2 illustrates the current marking channel for vegetable and root crops used by restaurants according to source. Restaurants depend on farmers, public market, and wholesale companies for supplying their vegetable and root crops. Medium restaurants depend on the public market as the main source of their vegetable and root crops.

2.6.2. Hotels

Barbados has around 60 hotels that provide accommodation services for tourists. Hotels are an important segment of vegetable and root crops market that usually required high quality products. According to the marketing research analysis, all hotels are willing to use the domestic vegetable and root crops instead of imported products. Yet, the main challenges that they face with the domestic supply is the quality and supply consistency of domestic products. We estimated 36 per cent of the hotels are having consistency issue of domestic supply of vegetables and root crops, where local producers are unable to supply the products all around the year. In addition, 32per cent of the hotels indicated the low quality and poor post-harvest services of the domestic vegetable and root crops. Table 8 illustrates the market channels for vegetable and root crops used by hotels. The information indicate that hotels depend on imported vegetable and root crops through the wholesale channel for most crops except the eddoes. The bulk amounts of yellow and red sweet pepper used by hotels are supplied through the importing companies.

2.6.3. Supermarkets

Supermarkets are the major channel for vegetable and root crops in Barbados. High and middle-income consumers are using different

supermarket chains that spread around the Island to obtain their needs of vegetable and root crops. The supermarkets have different pricing strategies that depend on the demographic and income characteristics of their customers. The marketing survey data indicates that supermarkets are facing the same challenges with the domestic supply of the vegetable and root crops. According to the market survey, third of the supermarkets are unsatisfied with the current suppliers of vegetable and root crops. Despite their willing to supply domestic vegetable and root crops, 40 per cent indicated a supply consistency to be the major challenges, while 20per cent referred to the poor-quality issue. Furthermore, 26 per cent of the supermarkets complained about the small quantity of domestic supply. Poor quality issues include grading, cleaning, and size of domestic products especially lettuce, tomato, and onion. The supermarkets almost depend completely on the imports for crops such as iceberg lettuce, romaine lettuce, red onion, yellow sweet pepper, and red sweet peppers.

2.6.4. Public market- vendors

Public markets and street vendors supply vegetable and root crops for significant portion of Barbadians, especially lower and middle-income residents. The main public market is Cheapside Public Market that located in Bridgetown. The public market hosts both local farmers and vendors whom selling both domestic and imported vegetable, root crops, and fruits in addition to different kind of meat and chickens. The market provides stands and cooling storage facilities for vendors and farmers. The vendors/farmers are charged on daily base at $ 0.37 US or at monthly rate of $ 4.0 US. The market has a capacity over 200 stands and open 6 days a week. Yet, the actual occupation is between 110- 120 vendors that mostly operate only in Friday and Saturday. Near to the Cheapside Public Market, a private farmer market that facilitated by the government, (BARVEN) Market, managed by Barbados Association of Retailers, Vendors and Entrepreneurs is a temporary market for both farmers and vendors that supplying different crops and operate every Friday and Saturday of the week. The capacity of that market is around 60 stands and it managed completely by the vendor association. In addition, vendor stands selling vegetable and root crops could found around streets and road corners of the entire Island.

2.6.5. Market segments

Table 4 showed the projected demand, market gap, and demand surplus for vegetable and root crops. Results indicate that tomato, onion, melon, sweet potato, pumpkin, sweet pepper (green), and carrot are the highest

demanded crops according to the survey analysis. Supermarket and public market are the major channels for those crops in term of quantity. Yet, information refers to higher demand comparing to the actual supply (domestic production and imports) for most crops except lettuce, cassava, and hot pepper. According to the results from interviews with different stakeholders in the industry, the surplus could be explained by uncounted imports, uncounted domestic production, overestimated consumption in public markets.

Table 4: Demand and Market Channels for Vegetable and Root Crops

Crop	TS (Ton)	DP (Ton)	Supermarkets Demand	Supermarkets percent	Restaurants Demand	Restaurants percent	Hotels Demand	Hotels percent	Public Market Demand	Public Market percent	Estimated TD	Demand/ Surplus
Tomato	671	332	1423	52.00	183	7.00	304	11.00	841	31.00	2750	2079
Onion	2365	411	308	13.00	260	11.00	334	14.00	1500	62.00	2402	37
Melon	701	226	937	41.00	123	5.00	249	11.00	964	42.00	2273	1572
S. Potato	1202	1167	740	33.00	199	9.00	166	7.00	1132	51.00	2237	1035
Pumpkin	471	169	921	49.00	107	6.00	112	6.00	721	39.00	1861	1390
S.P. Green	583	304	460	37.00	133	11.00	62	5.00	577	47.00	1232	649
Carrot	996	158	850	71.00	50	4.00	300	25.00	5	0.00	1205	209
Yam	245	181	629	53.00	30	3.00	14	1.00	520	44.00	1192	947
Cabbage	1038	471	511	44.00	100	9.00	125	11.00	428	37.00	1164	126
Lettuce	1368	587	254	34.00	245	33.00	214	29.00	31	4.00	744	(625)
Beet	68	13	107	38.00	13	4.00	26	9.00	138	49.00	284	217
Been	268	265	73	31.00	10	4.00	19	8.00	132	57.00	234	(34)
Cassava	479	479	45	21.00	16	7.00	9	4.00	144	67.00	214	(265)
Eddoes	260	161	61	29.00	9	4.00	1	0.00	141	67.00	212	(48)
S.P. Red	79	0	154	83.00	2	1.00	28	15.00	1	1.00	185	106
S.P. Yellow	79	0	154	83.00	2	1.00	28	15.00	1	1.00	185	106
Red Onion	40	0	36	30.00	10	8.00	42	36.00	31	26.00	118	78
Hot pepper	166	148	7	19.00	2	5.00	4	11.00	25	65.00	38	(128)
Total	11079	5072	7670		1494		2037		7332		18530	7451
TS: Total Supply; DP: Domestic Production; TD: Estimated Total Demand												

Table 4 outlined that the domestic production is arrived at 11079 tonnes and the total estimated demand is arrived at 18530 tonnes leaving the deficit of 7451 tonnes for the human consumption which are supposed to be met from the imports from different potential destinations.

2.6.6. Barrier to the Market

Agricultural sector is perfect competition market, where there are no legal barriers to enter or to exit the market. Yet, investing in agricultural activities is associating with large capital investment, uncertainty, and high risk. The uncertainty associated with different factors that affecting the agricultural production such as price fluctuation, diseases, and climate changes such as drought and flood. Yet, higher level of certainty and lower risk can be achieved in agricultural investment through the implementation of modern technology and good management practices. Form the interviews and brain storming focal groups with several experts and stakeholders of the agricultural sector in Barbados, the main barriers that slow down the domestic production can be summarized in the following:

1. High initial capital cost
2. Lacking the knowledge of intensive production
3. Small farming capacity
4. Week farmers cooperation
5. Low interest among youth in agricultural sector
6. Bad management practices
7. Poor research development
8. The absence of economic and financing modelling
9. Environmental problem such as monkeys and birds
10. Vulnerability to climate condition
11. Crop thieving
12. Low labor's productivity
13. High cost of production

In addition, marketing vegetable and root crops has serious problems. Based on the marketing research, stakeholders including the restaurants, supermarkets, hotels, and experts pointed the following barriers for marketing domestic vegetable and root crops:

1. Unreliable quantity of domestic supply
2. Low quality of domestic production

3. Inconsistent supply

4. Poor postharvest treatments

5. Lack of agricultural marketing professionalism

6. Lack of trust and joyously between farmers and the marketing channels

3. Conclusions

Population growth and increased tourism activities in many Small Island Developing States that depend on tourism sector have stressed it's the food security condition. Limited resources and climate variability added more challenges for food security, making those Islands food net importers. Recent increases in the international food prices, vulnerability to climate change, and financial crisis led many SIDS to highlight the need for economy diversification and increase the food sovereignty. Yet, few attempted have addressed the challenges and the potential of the food sector in those Small Islands. In this paper, we investigated the production and marketing potential and challenges facing the vegetable and root crops sector in Barbados as an example of Small Island Developing State. Employing data from the secondary resources and marketing research survey, we investigated the trend, direction, concentration, scope of the vegetable ad root crop market in Barbados.

Our findings indicate that there is growing market for producing vegetable and root crops domestically in Barbados. There is a high marketing potential for cabbage, tomato, lettuce, carrot, melon, sweet pepper, pumpkin, and beet in addition to the onion. Those crops have high demand trends and there is huge marketing gap that could be fulfilled by domestic production. Other vegetable and root crops investigated in this study have high and low demand but there is no market gap and small chance for penetration to the market. Yet, increasing domestic production from those crops could be sustainable only under the adaptation of modern technologies such as greenhouse and drip irrigation to avoid the undesired climate condition and ensure consistency of the supplied products to the market.

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Chapter - 14

Block Chain Technology in Intellectual Property Protection of Cross-Border E-Commerce in China

Liu Xun, Yang Chuxin and He Tianli

Abstract

Due to the multi-centered and open and transparent features of block chain technology, everyone can participate in database records, which can effectively carry out traceability management and is widely used in many fields. At present, cross-border E-Commerce customs supervision faces many urgent problems to be solved. Due to its intangible and regional characteristics, intellectual property rights still have a large number of infringements despite the increasingly perfect customs intellectual property protection regulations and the continuous optimization of protection modes. Due to the characteristics of cross-border E-Commerce fragmentation, it is difficult for Customs to protect the intellectual property rights of cross-border e- commerce trade goods. On the basis of introducing the characteristics and application of block chain technology, this paper proposes that the customs as a supervisory department should fully implement the application of new technologies and intellectual property protection regulations in view of the traceability problems in the intellectual property protection of cross-border E-Commerce customs. Improvement and business system innovation to strengthen the protection of cross-border E-Commerce intellectual property rights.

Keywords: Block Chain Technology; Cross-Border E-Commerce; Intellectual Property Protection;

1. What is Block Chain Technology?

Block Chain technology, or BT (Block Chain Technology), also known as distributed control technology, is an Internet Database Technology. It is characterized by multi-centered, open and transparent, so that everyone can participate in database records, which can be effective Traceability. This is not just a technological revolution, but a cognitive revolution. Its true value lies not in technology but in the reconstruction of business logic. The nature

of the Block Chain is decentralized, so that each node on the Block Chain is fully and individually operated. Once a problem occurs in one link, other links can be automatically connected and operated. Due to the parallel and cross-registration of each data on the Block Chain, the data becomes more and more real, timely and correct, breaking the original information island phenomenon. At the same time, a single data is formed into a data chain, and then woven into a data network from the data chain, and then a logically related data block is formed from the data network. This makes a single piece of data more and more valuable, because it can be registered, aggregated and analyzed from different links, different perspectives and different levels. This is like having a relationship between financial data, books, and statements. As long as one data is wrong, there will be problems in the entire book and report. Sometimes false data logins occur, resulting in false and fake reports. But using the Block Chain to form a huge report for the entire business, each data must have a logical relationship to ensure the correctness of each data, which effectively avoids the registration of fake data. The logic of the Block Chain is established, but it takes a lot of effort to build a huge architecture. Currently governments, banks and large groups are exploring the use of chain block area, as business logic thinking SMEs can borrow block chain implementation of the full range of data entry, management and analysis, so that the enterprise's own data to create business value.

The first phase of the Internet world is defined by open protocols and knowledge sharing. The beauty of open protocols is that those who find and support them early can harness them in new and exciting ways; the two phases are gradually dominated by closed architectures and proprietary databases. Openness to basic issues is better than closed. At present, the pursuit of free and equal Block Chain is the only hope for reviving the open agreement. Whether it can deliver on its promises will depend to a large extent on the proponents of these platforms.

Block Chain with smart contract technology, through the "Cross-border E-Commerce Chain", all aspects can more easily found out the accurate historical credit situation of the counterparty, can establish a cooperative mechanism more quickly, to a large extent avoid default and fraud; the problem area using block chain technology before, whether related to the import and export of goods infringing intellectual property rights ahead of the record business needs through customs, so as to facilitate customs protection of intellectual property rights implementation, not for the record companies difficult peacekeeping right. After applying Block Chain Technology to the entire transaction and regulatory process, if the

transaction behavior is based on Block Chain and smart contracts, then the accuracy of supervision can be effectively guaranteed, and there are still some problems in reducing Block Chain Technology: 51 per cent attack problems, hard fork problems, high transaction costs, slower validation, selective trading blocks, POW (workload proof) consensus mechanism energy consumption, data privacy is difficult to protect and so on. Customs can also grant credit to import and export enterprises based on transaction records more securely, and promote small and medium - sized enterprises that operate in good faith to simplify customs clearance procedures and improve customs clearance efficiency.

2. Traceability Problems in the Protection of Intellectual Property Rights of Cross-border E-Commerce Customs

In addition to the two main modes of B2B and B2C, the Cross-border E-Commerce model also has C2C. The goods sold on the general E-Commerce platform include two types of goods sold by third-party sellers of self-operated goods. Self-operated products can be strictly audited due to the E-Commerce platform, and have high control over the procurement, transportation, warehousing, and sales of goods. The probability of IPR infringement complaints is relatively low, and the relevant intellectual property laws and regulations can be directly applied. Therefore, the controversy caused is small. For the products sold by third-party sellers, although the qualifications of the sellers can be reviewed when they are stationed, the platform receives more IPR infringement complaints than self-operated commodities because of the low degree of control over information display and specific transaction processes. There are more problems. To facilitate cross-border E-Commerce and other new state health Industrial development as the goal, continue to promote the field of Internet infringement and counterfeiting special treatment, customs and import and export platform to strengthen the fight against cross-border E-Commerce infringement and counterfeiting.

In 2018, Dongguan Customs inspected the watches that were exported to Hong Kong through a Cross-border E-Commerce platform. It was found that the watches involved a large number of trademarks, and they were all expensive brands such as Rolex, Gucci and Patek Philippe. However, the price declared to the customs is obviously low, and the packaging of the goods is only wrapped with plastic film. When the package was unpacked, it was found that the workmanship of the watch was rather rough, and there were even unfinished plastic burrs. The brand's right holders have identified the watches as infringing and counterfeit products, and the customs has detained 8340 watches. If the Amazon platform finds an infringing item, it

will close the entire store. One month's sales is a 50w US dollar account, and the seller's inventory in FBA must be at least 1:1. So for these sellers, the loss of an account to the seller is definitely much higher than the cost of investing in intellectual property 2017.

Hangzhou Customs and Alibaba Group established the "information sharing, interoperability clues, joint fight against" Cross-border electricity supplier normalization of intellectual property protection coordination mechanism and to inform its infringement clues, from the latter than to verify and close the infringement shops 37, the infringement criminal clues notified by the two parties have entered the criminal procedure. Although it is currently possible to crack down on infringements through customs confiscation of goods and platform closures, these protection measures are based on the fact that the relevant authorities only intervene when the intellectual right holders actively claim rights, but for unregistered products, their trademarks. Whether copyright and patent rights are infringed is hard to find, which inevitably increases the procedures for intellectual property protection and reduces the efficiency of customs clearance for Cross-border E-Commerce companies. In addition, due to the fragmentation and miniaturization of Cross-border E-Commerce, the difficulty of finding infringement cases is still relatively large, and the protection effect is not very satisfactory. How do both relaxed and also live pipe, once and for all to establish a long-term mechanism of change, "people do not move, officials do not study," the status quo of this? I believe that the full use of the block chain technology in cross-border electricity supplier in IT will effectively enhance the protection of intellectual property rights while improving the efficiency of customs clearance, and further optimize the Cross-border E-Commerce business environment.

3.   How to apply Block Chain to Solve Problems

In terms of cross-border E-Commerce intellectual property protection, production enterprises can attach importance to the registration and protection of intellectual property rights such as trademarks, and   the platform can set up a special intellectual property management department to strengthen management. As the customs department of the regulatory department, it is necessary to strengthen the protection by applying new technologies and improving intellectual property protection regulations and business system innovation.

(A) To promote the use of district and block chain technology in the field of customs protection of intellectual property.

How to ensure that the manufacturer of import and export goods is not

infringed? Cross-border E-Commerce products are not easy to track the product launch through the global supply chain because of the many aspects of production, transportation, distribution, etc. of finished products. Block Chain technology helps reduce tracking difficulty.

First, manufacturers of cross-border E-Commerce goods can affix RFID-type electronic tags that can be scanned and related to Block Chain Technology. Then, how many products are produced in this category, and which products are purchased and exported by enterprises will be clear at a glance. When the customs declaration is exported, it can be traced directly to the source of the Golden Gate II system when there is no paper declaration to ensure the legality and safety of the product source. Its structure can be based on the "super book" of the Block Chain project developed by Ethereum and the Linux Foundation. With the circulation of products in various channels, the information of each link is automatically added to the Block Chain, customs work people can easily verify the source of the product through the mobile app.

Block Chain technology is used to enhance the tracking of transaction information flow, cross-border logistics and cross-border payments with data flow of three flows. Chain block the use of district technology will feature authentic record also enable Customs to communicate with consumers to educate consumers wary of the risks of counterfeit goods and to improve the ability of consumers to buy their product authenticity verification. The large-scale application of Block Chains cannot be achieved overnight. Part of the record can be solved through a non-Block Chain platform to solve the problem of limited size. Under the guidance of the General Affairs Office of Zhejiang Bureau and the Inspection Department of Hangzhou Bureau, the Hangzhou Bureau actively explored the direct release system for import and export goods inspection and quarantine, and used "Ping An Travel" as a technical means to manage the transportation process of import and export goods in real time and improve monitoring. In the link, the inspection and customs clearance time will be further shortened, the customs clearance cost of enterprises will be reduced, and the construction of the "Great Customs Clearance" for entry-exit inspection and quarantine will be promoted. In the next stage, the Hangzhou Bureau will try to use the "electronic tag" to monitor the status of the door of the straight-through cargo container to achieve effective supervision of the straight-through cargo transportation process.

Second, the application of Block Chain technology to improve the effectiveness of customs cross-border E-Commerce intellectual property supervision. Combining the characteristics of cross-border transactions, the

semantic database of illegal behaviors is established, and the illegal behavior categories are regularly searched to effectively find illegal clues, and the clues are dispatched and processed in time. Applying new technologies and equipment such as webpage retention and electronic evidence on-site forensics equipment to crack down on illegal activities such as counterfeiting trademark infringement of patent rights. Explore the use of technology to build the chain block area between countries to combat illegal cross-border trade coordination mechanism to jointly promote the healthy development of cross-border electricity supplier.

(2) The customs supervision regulations cannot be weakened due to the application of new technologies and need to be further strengthened.

Although the "decentralized" Block Chain Technology allows the entire customs IP protection system to operate automatically without central authority management. The two customs clearance entities (customs and customs declaration units) can realize mutual trust creation at low cost and speed without the intervention of third-party organizations, thus achieving fast customs clearance. However, it does not mean leaving unmanned management. The Block Chain system is still an information system, and it needs to be iteratively upgraded according to new technologies and requirements. There must be a corresponding governance mechanism behind it. Trust in the Block Chain does not mean that it must oppose the customs supervision of the regulatory system. Further revision of legislation and improvement of relevant regulatory measures should not lag behind reality. Regulators should introduce relevant laws and regulations to firmly support each transaction entity in controlling its online identity, transactions, logistics and capital flow data. But regulators should not design agreements that collectively restrict such things as identity. They will be developed in the Block Chain and open source to the majority of users. The task of storing Cross-border E-Commerce data requires the assistance of all parties in the society, is created as a public intellectual property, is funded by investors who prefer it, and operates under the appropriate supervision and support of the regulatory body.

(3) Effectively link the protection of customs intellectual property rights with the credit management of import and export enterprises, and further improve the joint incentive and joint disciplinary mechanisms.

The use of technology to strengthen cross-border area chain block the electricity business customs supervision of intellectual property rights by big data. Strengthen data sharing with commodity inspection, taxation, foreign exchange and other departments, and establish an information platform that

integrates big data such as registration filing management, administrative licensing management, daily supervision, emergency management, audit enforcement, and credit assessment. Periodic analysis of the relevant data, the main point of research sentenced risk of cross-border electricity providers existing intellectual property near future, to provide evidence for a search, and risk warning special rectification. Refining cooperation with big data on key Cross-border E-Commerce platforms and strengthening the application of anti-counterfeiting technology platform.

Guide the E-Commerce platform to analyze the transaction data, payment data and logistics data that it has mastered through relevant technical means and management measures, actively discover the unfair competition behavior involving infringement, and report to the customs intellectual property supervision department in time. Explore cross-regional monitoring and regulatory coordination mechanisms to achieve integration of law enforcement data between the General Administration of Customs and local governments. Strengthen departmental collaboration and enhance cross-border E-Commerce supervision. Relying on the electronic port platform, it will strengthen interconnection with customs, commodity inspection, postal services, banking and other departments, and actively promote the establishment of a "single window" platform. Establish a multi-sector joint disciplinary mechanism, carry out comprehensive supervision of Cross-border E- Commerce, and make breakthroughs in promoting inter-departmental quality inspection mutual recognition and joint implementation of the seven-day unreasonable return system. Improve the mechanism of social organization and governance. Encourage E-Commerce business circles, industry associations, non-profit organizations, third-party evaluation agencies and other social organizations to participate in social co-governance.

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Chapter - 15

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Rural E-Commerce in Zhijiang City, China

Amar Razzaq

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Abstract

This report outlines the findings from Zhijiang City and its rural areas, where E-Commerce is an emerging phenomenon.

The Zhijiang City

Zhijiang City, Yichang, Hubei, China

Zhijiang is a county-level city of Yichang City, in the west of Hubei province, People's Republic of China. Until the 1990s Zhijiang was a county. It is located on the left (Northern) shore of the Yangtze River, downstream from Yichang center city. It is an important node city for the open development of the Yangtze River Economic Belt. The county and county economy have developed to one of the advanced counties and cities, ranking 76th among the top 100 counties and cities in the country and the first in the province. Zhijiang's economic prosperity is mainly due to the strong industrial and agricultural base in the province. The city has formed four pillar industries of high-end food manufacturing, new chemical materials, medical supplies, high-end textiles and advanced equipment manufacturing. Zhijiang is a large agricultural city. The major agricultural products are rice, rapeseed, live pigs, citrus, and cotton.

Zhijiang was successfully selected for a new round (2018-2020), the nominated city of national civilized city, and the "Civilized City of Hubei Province"; Dongshi Town and Caodian Village were awarded provincial-level civilized towns, civilized villages. The Guanmiao Mountain Village is rated as "2017 China Beautiful Leisure Village" and National Civilized Village. Zhijiang has a long history and is a famous historical and cultural city in the province. Zhijiang was called Danyang in ancient times,

and Chu culture has a long history. Zhijiang is one of the birthplaces of Chengbeixi culture and Daxi culture. The Guanmiaoshan site, which represents the Neolithic culture, is listed as a national key cultural relic's protection unit.

Zhijiang is a "hometown of Chinese folk culture and art" and has national and provincial intangible cultural heritages such as Zhijiang Folk Blowing Music and Zhijiang Nanguan. Zhijiang is a "Chinese famous liquor city". The Qiantaiji Distillery represents the long-standing wine culture of Zhijiang, and the "Zhijiang" wine is well-known throughout the country. Zhijiang vigorously advocate national fitness, low-carbon travel, and build bicycle lanes. Zhijiang has become the first shared bicycle demonstration county in the country, and the 37th Mobie bicycle in the world has entered the city. Bicycle sports has become a new fashion for citizens to travel.

E-Commerce in Zhijiang

Zhijiang has a superior location and is a transportation hub and E-Commerce city in the province. The Zhijiang River is an important node of the national regional transportation network. The Yangtze River Golden Waterway runs through the east and west, with a natural deep water coastline of 111.5 kilometers. It has 25 docks and 39 berths. The annual cargo handling capacity is 11.46 million tonnes.

E-Commerce entrepreneurship in Zhijiang is at the forefront of the country. According to the public E-Commerce entrepreneurship rankings released by the Alibaba Research Institute, Zhijiang ranked second in the central and western region counties. It was also ranked second in the country in E-Commerce men's shoes sales.

The Pinghu Village of Dongshi Town became the first in Yichang and the second Taobao Village in the province. Currently, four of the nine Taobao villages in Hubei Province are located in Zhijiang. Relying on a good transportation location, industrial base, and E-Commerce ecology, Zhijiang is accelerating the creation of China's men's shoes E-Commerce capital, the Three Gorges Eco-Economic Cooperation Zone, E-Commerce center and Express logistics distribution center.

Zhijiang E-Commerce Industrial Park

The giant skyscraper of the Zhijiang E-Commerce Industrial Park is not easily overlooked by passers-by. This industrial park has become the driving force of E-Commerce in the city. The park integrates the functions of public

service, marketing, product display, logistics and distribution, innovation and entrepreneurship, financing support and other E-Commerce industry chains, which can accommodate 100 home appliance companies and entrepreneurs. The Zhejiang E-Commerce operation model through the introduction of specialized "operating service providers", the construction of "platform + company + intelligent logistics + base + farmers" and a comprehensive integration of online and offline makes Zhijiang products seamlessly connect with the market. The E-Commerce industrial park has become a new engine for economic transformation and development of the city and a powerful weapon to promote the rapid development of the city's economy.

The Park Has the Following Service Centers and Facilities

- Agricultural Product Quality and Safety Traceability Center
- The "Golden and Tasteful" Brand Construction Center
- The Village Taozhijiang Service Center
- The E-Commerce Promotion Center
- The Maisheng Zhongchuang Space
- Agricultural Products Exhibition Center
- Livestream Broadcast Room
- Brainstorming Room

The park has a service area for China's four major E-Commerce platforms. It serves approximately 11,000 companies and 7,800 online stores. These E-Commerce companies and online stores employ approximately 20,000 people. The city sends out approximately 460,000 packages per day.

The park provides business incubation services for companies of a certain size. For the first three years, they do not charge any rent for office space. In addition, it has opened a dedicated E-Commerce training center for all citizens and villagers. They regularly organize E-Commerce training courses.

The E-Commerce Promotion Model in Zhijiang

During the field trip, we visited four Taobao villages in three towns.

- Longquantang village in Wen'an County
- Fairy Village in Fairy Town
- Pinghu Village and Yaojiagang Village in Dongshi Town

In addition, we visited some soon-to-beome Taobao villages, such as Tongxinqiao Village in Wen'an Town and Wutongmiao Village in Fairy Town. When traveling in the country, the town officials also took us to visit some E-Commerce companies selling agricultural and industrial products. We had the opportunity to visit an E-Commerce company run by female entrepreneurs that sell traditional Chinese dresses.

Common Features of Taobao Villages in Zhijiang

We observed some common features of Zhijiang Village in Zhijiang.

- The village has a comprehensive E-Commerce service center. The service center serves as a training and brainstorming center, product display center, business incubator, and warehouse, packaging and logistics center.

- The E-Commerce is promoted by inviting established E-Commerce companies from other areas. The company being invited must fulfil a certain criterion which is based on experience and brand worth.

- E-Commerce companies provide support to villagers in three ways: (1) free E-Commerce training; (2) opportunities to sell products as commission agents in the company's online store; (3) hiring villagers to engage in jobs like packaging, logistics, etc.

- The government has provided a lot of support to E-Commerce companies which agree to come to the village. Support forms include free office and storage space, tax subsidies, and cheap labor in rural areas.

- In order to attract villagers to participate in E-Commerce entrepreneurs, the government provides economic incentives such as daily fixed amount support and a fixed amount for each item sold on the E-Commerce platform.

- E-Commerce is being promoted through the Public Private Partnership (PPP) model.

General Thoughts

Is the Taobao Village Model (Rural E-Commerce) a one-size-fits-all Approach?

The Answer is No.

This visit showed that the Government and Ali Baba have used a different approach in Zhijiang for promoting e-commerce. The type of model that fits a particular area depends on the particular geographic and the

demographic characteristics of that area.

For example, in Pinghu Village in Dangxi Town, government support has been instrumental in promoting e-commerce. This village is made up of displaced people by the Three Gorges Dam. This village has no history of farming. In addition, the villagers did not cultivate land to for agriculture. Therefore, the government is trying to reduce poverty through rural e-commerce.

In order to attract people to start e-commerce, the government provides economic incentives for villagers. People who join E-Commerce can get 15-20 yuan a day. In addition, each package they send out through Taobao can get 5 yuan.

The same model is being used in Longquantang, another village near Zhijiang City. In this village, the government invited an E-Commerce company to attract villagers to join e-commerce. The company provides a variety of support to villagers, including product development, training and branding. They hire villagers as marketing agents to sell their products. The villagers receive commissions for each piece of product they sell through E-Commerce.

The products traded in Pinghu and Longquantang are different. In Pinghu, the main products are body heating stickers, while Longquantang mainly sells agricultural products. However, the common feature of these two villages is their lack of experience and reluctance to join e-commerce. Therefore, the government uses economic incentives to promote e-commerce. In addition, they can use the knowledge resources and experience of established E-Commerce companies. After the initial exposure and E-Commerce experience, many villagers have setup their own online stores.

Does a Village Need to have Special Features to become Taobao Village?

Contrary to our original hypothesis, it is not true. As we saw in Pinghu and Longquantang, there is no special product history. We also visited some E-Commerce sellers selling multifunctional traditional stoves. This stove has no unique product history. However, the business is successful. Although it is an industrial product, we saw a seller buying heaters from different factories and selling them online. This E-Commerce model can still promote local economic development by creating local employment opportunities.

Perhaps for agricultural products, economies of scale is an important factor in determining the success of e-commerce. In this case, a large

company can handle the main tasks of collecting products and building customer base through mass marketing budgets. Villagers can participate in different nodes of the supply chain. We saw this at several orange processing plants where they sort the orange into different grades and sell online. The factory buys oranges from nearby farmers as well as from other cities, divides them into different categories and sells them online. However, most of the employees are villagers and farmers. These factories have achieved economies of scale. In addition, they employ local people in the factories to accomplish different tasks and thus promote the local economic development.

What are the Implications of Taobao Village Model for Developing Countries?

As the government has been playing a major role in promoting rural E-Commerce such as seen in Taobao Village, we expect this model to be highly replicated in other countries. The PPP model used in Zhijaing is particularly important. Villages in countries such as Pakistan and India are underdeveloped in terms of human resources, entrepreneurial thinking and logistics services. Therefore, individual sellers are unlikely to survive in the E-Commerce platform.

The PPP model provides various support to villagers so that they can leverage the technical resources and experience of established E-Commerce companies to become independent. In the short term, this model has enormous potential for rural economic development and job creation.

Conclusions

- Government support is critical to the minimum level of infrastructure required for rural e-commerce
- Zhijiang city administration sees E-Commerce as an industrial pillar
- E-Commerce entrepreneurship does not require a high level of formal education, which is an advantage for developing countries
- Rural E-Commerce has a positive economic impact on the rural economy
- The rural E-Commerce model suitable for a particular area depends upon the unique local features
- Public-Private Partnership (PPP) is a relatively superior model for promoting E-Commerce in areas where there is no monopoly advantage